



# Dräger Gas List

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List of detectable gases and vapors

**Dräger**

Technology for Life



# Dräger Gas List 2025

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Gas list to find a suitable fixed installed Dräger gas detection instrument for the detection of a specified substance

## Search Indexes

This list of gases consists of three search indexes and the main part. The search indexes are suitable to find the substance in question by having only its CAS number, its name (including short name or technical abbreviation), or its sum formula.

Using the search indexes you will obtain the substance's associated number to look for in the list of gases. If the substance is not listed, this does not necessarily mean that this substance is not detectable.

### Search Index for CAS Number

Search Index for CAS Number The CAS number is a worldwide used code to identify a chemical substance non-ambiguously. This number is issued by the Chemical Abstracts Service and is the easiest way to characterize a chemical substance. Knowing the CAS no. means to be able to get comprehensive information and links from internet and search engines.

The considered substance is unambiguously specified by the CAS number.

### Search Index for Name / Abbreviation

When sorting alphabetically the chemical prefixes such as n-, i-, sec-, tert-, N-, N.N-, or numbers were omitted. Please proceed correspondingly when looking for a substance.

When searching 1,2-Dichloroethane look for Dichloroethane, find tert-Butanol under Butanol and Methyl-tertbutylether under Methylbutylether.

This search index also lists short names or technical abbreviations. However these names may be ambiguous from chemical aspects (e.g. Dimethyl ether and Dimethoxy ethane usually both are short-named as "DME").

Furthermore refrigerants were considered. The so called ASHRAE code is basically preceded by "R" (meaning refrigerant) although in other countries characters such as "F", "FCK", "HFA", "HFC", "HFO" or names such as "Freon", "Frigen" and "Propellant" etc. are used. So, if you look for e.g. Freon 134a please search for R134a.

### Search Index for Sum Formula

For every chemical formula - normally given as a semi-structure formula - a sum formula exists. A sum formula is formed according to the Hill-system: Within each sum formula the element symbol C (for Carbon) is on the first place, the element symbol H (for Hydrogen) on the second, followed by all other element symbols in alphabetical order. For every element symbol the order is given with increasing number of atoms of the corresponding molecule. So it seems a little bit strange having a sum formula of e.g. Ammonia  $H_N$ , of Sulphur dioxide  $O_2S$  and of Hydrogen cyanide CHN.

Having the chemical formula of a substance, the individual element symbols have to be summarized and sorted accordingly. With the sum formula obtained this way you can go into the search index for sum formulas to get the substance's associated number.

Example:  $CH_3COOH$

Sum formula is  $C_2H_4O_2$ . This is the sum formula of Acetic acid. But you can verify that this is also the sum formula of Methyl formate ( $HCOOCH_3$ ).

#### Attention:

Sum formulas may be ambiguous!

#### Disclaimer

The printed data have been ascertained with utmost care. Indemnifications or warranty claims on account of missing or incorrect data are excluded.



# The Gas List

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This list is the real list of gases. For each substance there are at least three lines. Besides the columns 1 and 16 of the current number the gas list comprises 20 further columns which are explained in the following:

## Column 2: Substance, Chemical

The main name covers two columns in the first line. The 2nd line shows the CAS-No., and the 3rd line shows the chemical formula.

## Column 3: Shortn., S-formula

If there is a technical abbreviation known it is listed in this column 2nd line. The sum formula is printed in the 3rd line.

## Column 4: Further synonyms

If further names are known the three most usual ones are listed here.

## Column 5: Molw. g/mol

In the first line the molecular weight (mol weight) M is listed. The mol weight is used in many calculations, e.g. you can calculate the relative density of a gas or Vapor by dividing value M by 28.96. If the result is less than 1 the gas is lighter

than air. In most cases the result will be greater than 1 - so it is heavier than air. In case of Vapors, however, the maximum Vapor pressure (the maximum concentration at a given temperature) in an air/Vapor mixture has to be regarded (see Vapor pressure column 7): Vapors can never exist in a 100 %v/v-concentration! Below the mol weight the value of the relative density compared to air is listed. It is marked by a subsequent 'r' (for relative).

Example: n-Butanol: 2.56 r

Vapors of n-Butanol are 2.56 times heavier than air.

By using the mol weight M you can convert concentrations given in %v/v (= % by vol.) or ppm to obtain g/m<sup>3</sup> or mg/m<sup>3</sup>.

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Using the mol weight M you can also calculate the density of a gas in kg/m<sup>3</sup> (at 20 °C and 1013 mbar) by simply multiplying with a factor of 0.04179:

Example: The mol weight of Propane is 44.1 g/mol, so the density of Propane is

$$\rho = 0.04179 \cdot 44.1 = 1.843 \text{ kg/m}^3$$

If density  $\rho$  and mol weight M are known you are able to calculate the amount of liquid to be evaporated in a given volume to obtain a defined Vapor concentration. However, it is very important that this liquid is evaporated completely. This requires a sufficiently high Vapor pressure.

Use the "calibration chamber formula": To obtain a Vapor concentration c in a volume of 3 liters at 20 °C and 1013 mbar you have to insert the following amount F (in microlitres) of the liquid:

$$F = 1.2478 \cdot \frac{M}{\rho} \cdot c$$

Example: Ethyl acetate, M = 88.1 g/mol,  $\rho = 0.90 \text{ g/ml}$ , LEL = 2.0 %v/v.

To obtain 50 %LEL (c = 1.0 %v/v) Vapor of Ethyl acetate in the 3 litres calibration chamber insert

$$F = 1.2478 \cdot \frac{88.1}{0.90} \cdot 1.0 = 122 \text{ microlitres}$$

of liquid Ethyl acetate.

If for the substance in question the calibration chamber procedure is applicable the value of the amount to be inserted into the 3 liters calibration chamber to obtain 50 %LEL (based on the LEL PTB in column 10) is printed below the value of the density. It is marked by a subsequent "v" (for volume).

Example: n-Hexane: 81 v

You need to insert 81 microlitres into the Dräger Calibration Chamber to obtain 50 %LEL of n-Hexane Vapor.

#### Column 6: Dens. g/ml

In this column the density  $\rho$  of the liquid in g/ml (= g/cm<sup>3</sup>) at 20 °C is listed. This value exists only for liquids, so gases are indicated by "Gas".

#### Column 7: Boil. °C

This column shows the boiling point of the substance in °C (at 1013 mbar).

Below the boiling point given in °C the boiling point is printed in °F. This value is marked by a subsequent "°F".

#### Column 8: p<sub>20</sub> mbar

Vapor pressure p<sub>20</sub> of a liquid at 20 °C given in mbar (= hPa). Vapor pressure is only defined for liquids. So for gases instead of the Vapor pressure you will find the marking "Gas" in this column.

The Vapor of each liquid forms a pressure which depends on the nature of liquid and the liquid's temperature. If the Vapor pressure is low, the liquid evaporates slowly and thus only produces low Vapor concentrations (for these flammable liquids the flash- point is usually high).

The maximum vapor concentration c<sub>max</sub> (saturated Vapor concentration in %v/v), which can only form in closed containments, can be calculated as follows:

$$c_{\text{max}} = 100 \cdot \frac{p_{20}}{1013 + p_{20}}$$

If the Vapor pressure is considerably lower than the atmospheric pressure, c<sub>max</sub> can be estimated by dividing the given Vapor pressure by the environmental atmospheric pressure.

Example: n-Nonane, p<sub>20</sub> = 5 mbar, so

$$c_{\text{max}} = 100 \cdot \frac{5}{1013} = 0.49 \text{ %v/v}$$

So at 20 °C no Vapor concentrations higher than 4900 ppm n-Nonane can exist. Higher temperatures or lower atmospheric pressure are necessary to produce higher Vapor concentrations. Since the Lower Explosion Limit is 0.7 % v/v, even in a closed containment at v/v, even in a closed containment at 20 °C no explosive Vapor/air-mixtures of n-Nonane can form. This is the reason why the "calibration chamber formula" does not apply for substances with a low Vapor pressure: at 20 °C it is not possible to produce Vapor concentrations of e.g. 0.6 %v/v of n-Nonane.

#### Column 9: Flpt. °C

This column shows the flashpoint of flammable liquids, preferably based on the source PTB. Flammable gases do not have a flashpoint and are marked by "Gas". Gases or liquids being non- flammable are marked by "n. a.".

The empirically determined flashpoint is defined as the temperature of a flammable liquid which (in a closed containment) is needed to obtain an ignitable Vapor concentration above the liquid's surface.

If ambient temperature and liquid temperature are clearly below the flashpoint (e.g. 10 °C lower), the liquid cannot be ignited.

Example: n-Nonane, flashpoint 31 °C, is not ignitable at 20 °C.

The relatively high flashpoint of n-Nonane is arising from its low Vapor pressure. As already shown it is not possible to produce Vapors of 100 %LEL under normal conditions (20 °C). As the flashpoint is a temperature you can also convert a flashpoint F given in degrees Celsius into a flashpoint F given in degrees Fahrenheit using the conversion.

$$F_{°F} = \frac{9}{5} \cdot F_{°C} + 32.$$

Example: n-Nonane, flashpoint is 31 °C,

$$F_{°F} = \frac{9}{5} \cdot 31 + 32 = 87.8 \text{ °F}.$$

Below the flashpoint F given in °C the flashpoint is printed in °F. This value is marked by a subsequent “°F”.

#### Columns 10, 11, 12, 13 and 14: LEL

These columns show the lower explosion limit in %v/v. Non-flammable gases and liquids are marked by “n. a.”. A void cell in this column indicates that the LEL is unknown. Five values of different sources are listed here:

**PTB:** Source: Brandes, Möller (PTB): Safety Characteristic Data, Vol. 1: Flammable Liquids and Gases, Wirtschaftsverlag NW, 2nd Edition, 2008.

**IEC:** IEC 60079-20-1: 2010, Explosive atmospheres - Material characteristics for gas and Vapor classification.

**NIOSH:** NIOSH Pocket Guide to Chemical Hazards, DHHS (NIOSH) Publication No. 2005-149, Sept. 2007.

**NFPA:** NFPA Fire Protection Guide to Hazardous Materials, 14th edition, 2010 (including the NFPA 497).

**RUS:** GOST R-51330.19:1999, Edition 2000 / 2007, originating from the former IEC-publication 60079-20:1996, but with several modifications and amendments.

If there is no LEL available from these five sources, LELs coming from other sources (e.g. the GESTIS database of hazardous substances) have been used, indicated by a \*. Also LELs obtained by halving the stoichiometric concentration of optimum combustion as an approximate estimation are marked by \*\*.

Conversion (valid at 20 °C):

By means of the mol weight (column 5) you can convert the LEL to g/m<sup>3</sup> by multiplying the LEL given in %v/v with the mol weight M and dividing it by 2.4.

Example: n-Nonane, M = 128.3 g/mol, LEL = 0.7 %v/v, so

$$LEL_{g/m^3} = \frac{128.3}{2.4} \cdot 0.7 = 37.4$$

The LEL of n-Nonane is 37.4 g/m<sup>3</sup>.

And vice versa:

$$LEL = \frac{2.4}{M} \cdot LEL_{g/m^3}$$

Below the values of the LEL given in %v/v the corresponding values given in g/m<sup>3</sup> are listed. They are enclosed in parenthesis.

#### Column 15: AIT °C

This column shows the auto-ignition temperature (AIT) of flammable gases and Vapors. For non-flammable substances this column shows “n. a.”. If known, the explosion group with subgroup, IIA, IIB or IIC (acc. to the IEC (EN) 60079-0 standard), is listed in the second line. If the ignition temperature is known, the third line contains the temperature class. Electrical devices to be operated in potentially explosive atmospheres containing the considered flammable substance must at least be marked with the given explosion group and temperature class:

Example: Allyl alcohol: AIT = 375 °C, IIB T2.

An electrical device must at least be marked IIB T2. Devices marked IIA T2 or IIB T1 are not allowed to be used in atmospheres where allyl alcohol may be present in potentially explosive concentrations.

#### Column 17 and 18: WEL Germ. and TLV USA

If available this column lists toxic limits as workplace exposure limit (WEL) or threshold limit values (TLV) in ppm.

**WEL Germ.:** Source: German legally binding TRGS 900, last update June 2017.

**TLV USA:** Source: OSHA.

If no OSHA values available: NIOSH.

Commonly the TLVs are average values, but sometimes ceiling values (marked by a “c”) are listed. In no case ceiling values are allowed to be exceeded. A WEL value followed by “T” indicates the tolerance concentration of carcinogenic substances according to the German legally binding TRGS 910.

If neither the German WEL nor the US TLV is listed this does not necessarily mean that the considered substance is not toxic! Short-term limit values are not included in this gas list.

Conversion (valid at 20 °C):

By means of the mol weight (column 5) you can convert the WEL or TLV to mg/m<sup>3</sup> by multiplying the given value in ppm with the mol weight M and dividing it by 24.

Example: n-Nonane, M = 128.3 g/mol, TLV = 200 ppm:

$$TLV_{\text{mg/m}^3} = \frac{128.3}{24} \cdot 200 = 1069$$

The TLV is 1069 mg/m<sup>3</sup>.

Vice versa:

$$TLV = \frac{24}{M} \cdot TLV_{\text{mg/m}^3}$$

Below the limit values given in ppm the corresponding values given in mg/m<sup>3</sup> are listed. They are enclosed in parenthesis. As these figures are exactly calculated they may slightly be different from the officially issued values which are mostly rounded values.

#### Column 19: MP - Measuring principle

The measuring principle is listed using the following abbreviations:

**CT** - catalytic, transmitter or sensing head using heat of reaction principle

**IR** - infra-red absorption, transmitter with IR sensor

**EC** - transmitter with electrochemical sensor

**OP** - infra-red absorption, open path measuring system

#### Column 20: Detectable with

This column lists the transmitters by means of which the considered substance is detectable. This information is self-explaining.

#### Column 21: Suitable measuring ranges

Remark: For transmitters of the series 5000 and 8000 the product name "Polytron" is mostly replaced by a "P".

#### PEX 3000, SE Ex, P 5200 and P 8200

For catalytic bead sensors and transmitters the full scale deflection value (f.s.d.) is always 100 %LEL. If starting with "10 //" also the 10 %LEL sensor can also be used for the detection of the listed substance. In this case the full scale deflection is 10 %LEL.

#### Dräger PIR 7000 type 334 and 340

If for the substance in consideration there is an individual data set which can be selected from a gas library for direct configuration this is indicated by the term "Gas-Library". Separated by a "/" also the lowest f.s.d. value in ppm is listed for these substances.

In any case the minimum and maximum f.s.d. values in %LEL are listed.

The information given for PIR 7000 is also valid for the transmitter P 8700 of the same type (334 or 340).

#### Dräger P 5700 type 334 and 340

To indicate that with this IR-transmitter only the given full scale deflection values are configurable, these are separated by a "+". So, "20 + 50 + 100 %LEL" means that only these three full scale deflection values can be configured.

#### Dräger PIR 3000, P5310, P8310

The full scale deflection value of these IR-transmitters is always 100 %LEL. Other measuring ranges are not suitable.

A "(!)" indicates that for the P 5310 and P 8310 or the DrägerSensor IR (DSIR) a special calibration procedure has to be performed.

#### For all IR-transmitters:

A "(\$)" indicates substances being surely detectable but not yet having undergone verifying measurements - so no calibration hints can be issued so far.

A "(?)" indicates substances which are reasonably assumed to be detectable but have not been verified so far in the application laboratory.

A "(&)" indicates that special hints for application and calibration have to be requested for the detection of this substance.

#### Pulsar

The expression "Polytron Pulsar 2" covers all the variants Polytron Pulsar, Polytron Pulsar 2 and Polytron Pulsar duct mount as well as Pulsar 7000 series. The full scale deflection value is 1 or 4 / 8 LELm, where 1 LELm refers to the duct mount variant. For certain substances cross sensitivity factors (CSF) are listed, these are valid in respect to propane (LEL = 1.7 %v/v) and the substance's LEL given here.

The CSF is listed in column 22.

#### Polytron 7000 and Polytron 8100

Separated by a "/" the minimum, standard, and maximum full scale deflection values are listed.

For substances with a measuring parameter data set in the sensor's EPROM an LDL (Lower Detection Limit) is listed. For further information refer to the sensor data sheet.

For substances available in the sensor's EPROM the full scale deflection values have to be multiplied by the given cross sensitivity factor.

Example: Morpholine with Polytron 7000 and sensor NH<sub>3</sub>: "50 / 100 ppm x 4" means that the configured f.s.d. of 50 or 100 ppm NH<sub>3</sub> corresponds to 200 or 400 ppm Morpholine. So when applying Morpholine to the sensor the reading has to be multiplied by factor 4 to obtain the true concentration.

Concerning the sensors OV1, OV2, H<sub>2</sub>S, and NH<sub>3</sub>, additionally the gas type to be configured is recommended:

Example: 1-Hexene: "as Aald x 2" means: To measure 1-Hexene configure for Aald = Acetic aldehyde (and calibrate for Acetic aldehyde) and multiply the reading by 2 to have the true concentration of 1-Hexene.

Remark: The given cross sensitivity factor may fluctuate considerably and should be individually determined by means of the target gas.

### **Polytron 5100**

Only the full scale deflection values separated by a "+" can be configured.

### **Polytron 3000 and Polytron 2000**

The possible full scale deflection values are separated by an "or" to indicate that these are different products.

### **Column 22: Important remarks**

Here you will find remarks e. g. concerning potential poisoning of catalytic bead sensors by corrosive or polymerizing substances and cross sensitivity factors S of electrochemical sensors resp. CSFs of the Pulsar.

### **Measuring performance approval**

If the considered substance is listed in the measuring performance certificate (mostly in respect to the "measuring function for explosion protection" acc. to EN 60079-29-1) this is indicated by "performance approved". This remark is valid for all the listed products.

For the results of the performance tests including the deviated application hints please refer to the relevant performance approval report and the instructions for use.

### **Cross sensitivity factors**

For electrochemical sensors the given relative sensitivities S are only valid for new sensors and a value fluctuation of about  $< \pm 30\%$ . A "\*" indicates a lower exemplary fluctuation of  $\leq \pm 10\%$ .

An "(L)" indicates that the sensor to be used for the substance in consideration is recommended for gas leak detection.

Example: OV1-sensor for Butylene oxide: "S = 0.4 (L)" means the sensitivity of the OV1-sensor exposed to Butylene oxide is ca. 40 % compared to Ethylene oxide.

This sensor should only be used to detect gas leaks of Butylene oxide. Since the cross sensitivity may fluctuate considerably from sensor to sensor it is recommended to test the sensor by means of a suitable concentration of the target gas.

### **Gas leak detection**

A gas leak is an unpredictable abnormal release of gases or Vapors of higher concentrations.

A gas leak has to be regarded as an exceptional event. In case of normal operation there is only clean air (without even low concentrations of the target gas or Vapor).

A gas detection system for gas leak detection means to give a warning when a reasonable alarm threshold is exceeded rather than to measure the current gas concentration exactly. This can be realized by the use of cross sensitivity factors as long as a proof test with a suitable concentration of the target gas triggers a preset alarm threshold under the current environmental conditions.

After a gas release a leak gas detection system needs to be checked for proper function.

### **Mixtures of gases and Vapors**

Not to expand this gas list unnecessarily, only pure substances, but not mixtures of gases and Vapors, are listed. This is especially true for mixtures of flammable solvents and fuels which are differently blended and handled under different product names by different manufacturers.

For %LEL-measurement the gas detection instrument has to be calibrated for those substances in relevant share in the mixture, which are detected with the least sensitivity. From this guideline calibration procedures based on pure substances can be derived. For example to detect Kerosene by means of a catalytic bead sensor commonly a Nonane-calibration is recommended. Moreover, a catalytic bead sensor calibrated for n-Nonane is also very suitable to detect numerous hydrocarbon mixtures such as gasolines, petrols, aviation fuels and jet petrols as well as Naphtha, Solvent Naphtha, Varnish Makers & Painters Naphtha (VMPN), White Spirit, etc.

However, whether such a calibration leads to safe detection in a given application can only be verified by thoroughly observing the individual substances of content or even by performing the according measurement tests in the laboratory.

# Search Index for CAS-Number

Gas / Vapor	No	Gas / Vapor	No	Gas / Vapor	No	Gas / Vapor	No	Gas / Vapor	No
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57-14-7	167	75-85-4	25	100-69-6	439	108-90-7	92	115-10-6	163
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75-76-3	401	100-50-5	389	108-87-2	287	112-40-3	185	527-53-7	395

Gas / Vapor	No	Gas / Vapor	No	Gas / Vapor	No	Gas / Vapor	No	Gas / Vapor	No
540-54-5	369	592-84-7	78	1003-03-8	112	4109-96-0	135	7783-82-6	429
540-67-0	290	593-53-3	294	1066-35-9	96	4262-43-5	71	7784-42-1	35
540-84-1	423	593-90-8	421	1066-40-6	426	4454-05-1	268	7790-91-2	90
540-88-5	62	598-56-1	164	1120-21-4	430	4806-61-5	203	7790-94-5	100
540-97-6	184	616-38-6	160	1185-55-3	319	5131-66-8	58	7803-51-2	347
541-02-6	115	622-97-9	316	1321-74-0	182	5989-27-5	261	7803-62-5	380
541-05-9	239	623-53-0	289	1333-74-0	250	7154-79-2	400	8000-41-7	385
541-41-3	202	624-89-5	293	1445-45-0	417	7446-09-5	384	10025-78-2	410
542-55-2	77	624-92-0	162	1569-01-3	362	7550-45-0	404	10025-87-3	348
542-75-6	134	627-27-0	54	1569-02-4	193	7637-07-2	39	10026-04-7	381
543-59-9	28	628-32-0	222	1590-87-0	181	7646-78-8	403	10028-15-6	336
544-01-4	120	628-63-7	22	1634-04-4	282	7647-01-0	252	10034-85-2	255
554-12-1	306	630-08-0	87	1640-89-7	205	7647-18-9	34	10035-10-6	251
556-67-2	331	637-92-3	200	1645-83-6	388	7664-39-3	254	10038-98-9	232
557-17-5	307	646-06-0	175	1663-39-4	65	7664-41-7	20	10049-04-4	89
557-98-2	99	681-84-5	399	1678-91-7	204	7665-72-7	55	10102-43-9	325
563-47-3	275	689-97-4	432	1712-64-7	377	7691-02-3	397	10102-44-0	324
563-80-4	309	695-12-5	434	1717-00-6	130	7697-37-2	322	10294-33-4	37
565-59-3	168	696-29-7	370	1873-88-7	234	7719-09-7	402	10294-34-5	38
583-48-2	166	766-09-6	220	2004-70-8	338	7719-12-2	349	13475-82-6	341
584-02-1	344	811-97-2	387	2031-62-1	139	7722-84-1	256	13482-23-0	267
589-34-4	297	872-05-9	117	2487-90-3	416	7726-95-6	40	13952-84-6	68
589-38-8	245	872-50-4	313	2517-43-3	266	7782-39-0	118	16219-75-3	216
590-19-2	41	919-94-8	29	2768-02-7	440	7782-41-4	224	16747-26-5	422
591-76-4	296	926-63-6	172	2807-30-9	360	7782-44-7	335	17129-06-5	194
591-78-6	244	930-22-3	43	3074-75-7	291	7782-50-5	88	19287-45-7	121
591-87-7	12	992-94-9	314	3178-22-1	76	7782-65-2	231	34590-94-8	271
591-97-9	94	993-07-7	425	3275-24-9	394	7783-06-4	258	111109-77-4	178
592-41-6	246	994-05-8	31	3277-26-7	396	7783-07-5	257	186598-40-3	70
592-43-8	247	996-35-0	171	3710-30-3	330	7783-58-6	233		
592-76-7	238	999-97-3	240	4091-39-8	93	7783-61-1	382		

## Search Index for Name/Abbreviation

Substance	No	Substance	No	Substance	No
2D	118	Allyl alcohol	13	i-Amyl formate	30
2PGIBE	58	Allyl aldehyde	9	Amyl hydride	342
2VP	439	Allylamine	14	Amylketone	147
3MBTA	280	Allyl bromide	15	tert-Amyl methyl ether	31
AA	13	Allylcarbinol	54	i-Amyl methyl ketone	277
Aald	1	Allyl chloride	16	n-Amyl methyl ketone	237
AC	253	Allylene	378	AN	4
Acetal	138	Allyl-2,3-epoxypropylether	17	Anhydrous ammonia	20
Acetaldehyde	1	Allylglycidylether	17	Aniline	32
Acetaldehyde diethyl acetal	138	Allyl methacrylate	18	Anisole	33
Acetic acid	2	Allyl-2-methyl acrylate	18	Anol	105
Acetic acid allyl ester	12	1-Allyloxy-2,3-epoxypropane	17	Anon	106
Acetic acid-2-butoxyethyl ester	57	Allyl trichloride	409	Antimony-(V)-chloride	34
Acetic acid butylester	61	AMA	18	Antimony pentachloride	34
Acetic acid chloride	7	Aminobenzene	32	Arsenic hydride	35
Acetic acid dimethyl amide	154	1-Aminobutane	67	Arsenic trihydride	35
Acetic acid-1,1-dimethyl ethylester	62	2-Aminobutane	68	Arsine	35
Acetic acid ethenyl ester	431	2-Amino-1-butanol	19	Azabenzene	379
Acetic acid ethyl ester	195	2-Aminobutan-1-ol	19	Azacyclohexane	351
Acetic acid methoxy propyl ester	272	2-Aminobutanol	19	Azacyclopropane	209
Acetic acid methyl ester	273	Aminocyclohexane	109	Azine	379
Acetic acid-2-methylpropyl ester	60	Aminocyclopentane	112	Azirane	209
Acetic acid pentyl ester	22	1-Amino-3-dimethylaminopropane	157	Aziridine	209
Acetic acid propyl ester	364	Aminoethane	197	B2A	68
Acetic acid sec butyl ester	59	2-Aminoethanol	190	BCHD	329
Acetic acid-o-trimethyl ester	417	Aminoethylene	209	Benzenamine	32
Acetic acid vinyl ester	431	1-Amino-2-ethylhexane	215	Benzene	36
Acetic aldehyde	1	Aminohexahydrobenzene	109	Benzene chloride	92
Acetone	3	1-Aminohexane	248	Benzene tetrahydride	107
Acetone dimethylacetal	153	Aminomethane	276	Benzol	36
Acetonitrile	4	3-Aminomethyl heptane	215	Bicyclo(2.2.1)hepta-2,5-diene	329
Acetophenone	5	1-Amino-2-methylpropane	66	cis-Bicyclo(4.4.0)decane	114
1-Acetoxy-2-butoxyethane	57	2-Amino-2-methylpropane	69	Bicycloheptadiene	329
1-Acetoxyethylene	431	1-Aminopentane	26	Bicyclohexyl	136
1-Acetoxypropane	364	1-Aminopropane	366	Biethylene	42
2-Acetoxypropane	363	2-Aminopropane	365	Bis(2-ethoxyethyl)-ether	143
Acetyl acetone	6	3-Aminoprop-1-ene	14	Bis(2-methoxyethyl)-ether	144
Acetyl benzene	5	3-Aminopropyl dimethylamine	157	Bis(methoxypropyl)ether	178
Acetylchloride	7	1-Amino propylene	14	Bis(trimethylsiloxy)methylsilane	234
p-Acetyldehyde	337	Ammonia	20	Bis-trimethylsilyl-amine	240
Acetyl dimethylamine	154	AMS	317	1,2-Bis-(dimethyl amino)-ethane	398
Acetylene	8	i-Amyl acetate	21	BMA	81
2-Acetyl propane	309	n-Amyl acetate	22	Boroethane	121
ACN	11	Amyl acetic ester	22	Boron bromide	37
Acroleic acid	10	3-Amyl alcohol	344	Boron chloride	38
Acrolein	9	i-Amyl alcohol	23	Boron fluoride	39
Acrylic acid	10	n-Amyl alcohol	24	Boron hydride	121
Acrylic acid ethyl ester	196	tert-Amyl alcohol	25	Boron tribromide	37
Acrylic acid methyl ester	274	n-Amylamine	26	Boron trichloride	38
Acrylic aldehyde	9	Amyl carbinol	243	Boron trifluoride	39
Acrylo-i-butylic ester	63	Amyl chloride	28	Boron trimethyl	421
Acrylo-tert-butylic ester	65	i-Amylchloride	27	Bromine	40
Acrylobutylic ester	64	n-Amylchloride	28	Bromoallylene	15
Acrylonitrile	11	n-Amylene	345	Bromoethane	199
Adipic ketone	111	Acetic acid i-amylester	21	Bromoethyl	199
Aetyl-2-propanone	6	Acetic acid n-amyl ester	22	Bromomethane	278
AGE	17	Ethyl tert-amyl ether	29	3-Bromopropene	15
Allyl acetate	12	tert-Amyl ethyl ether	29	BTBAS	70

Substance	No	Substance	No	Substance	No
BuAc	61	tert-Butylamine	69	i-Butyric aldehyde	83
1,2-Butadiene	41	Bis(tert-butylamino)silane	70	n-Butyric aldehyde	84
1,3-Butadiene	42	tert-Butyl arsine	71	Butyronitrile	85
1,3-Butadiene monoxide	43	N-Butyl-1-butanamine	122	n-Butyronitrile	85
i-Butanal	83	i-Butyl-i-butyrate	72	C11	430
n-Butanal	84	i-Butyl carbinol	23	C4=	51
i-Butane	44	n-Butyl carbinol	24	C4=	52
n-Butane	45	sec-Butyl carbinol	281	C4==	42
1-Butane amine	67	Butyl carbonic acid	343	1-Caprylene	334
2-Butane amine	68	Butyl cellosolve	56	Carbinol	265
Butanenitrile	85	Butyl cellosolve acetate	57	Carbon dioxide	86
1-Butanethiol	79	Butylchloride	74	Carbonic acid anhydride	86
Butane-1-thiol	79	i-Butyl chloride	73	Carbonic acid diethyl ester	142
1-Butanol	48	n-Butyl chloride	74	Carbonic acid dimethyl ester	160
2-Butanol	46	tert-Butylchloride	75	Carbonic acid ethyl methyl ester	289
Butan-1-ol	48	tert-Butylcyclohexane	76	Carbonic anhydride	86
Butan-2-ol	46	1-Butylene	51	Carbonic oxide	87
i-Butanol	47	2-Butylene	52	Carbon monoxide	87
n-Butanol	48	i-Butylene	53	Carbon oxide	87
tert-Butanol	49	1,3-Butyleneglycol monomethyl ether	266	Carbon oxychloride	346
2-Butanone	292	Butylene oxide	187	Carbonyl chloride	346
Butan-2-one	292	1,2-Butylen oxide	187	Carboxyethane	358
2-Butenal	50	Acetic acid i-butylester	60	Carvene	261
1-Butene	51	Acetic acid tert-butyl ester	62	Cellosolve acetate	192
2-Butene	52	Acrylic acid tert-butylester	65	CG	346
But-1-ene	51	Formic acid i-butylester	77	CHA	109
i-Butene	53	Propenoic acid i-butylester	63	Chlorine	88
3-Butene-1-ol	54	i-Butyl ethanoate	60	Chlorine dioxide	89
Butenine	432	n-Butyl ethanoate	61	Chlorine peroxide	89
1-Buten-3-one	438	tert-Butyl ethanoate	62	Chlorine trifluoride	90
1-Buten-3-yne	432	Butyl ether	123	2-Chloroacetaldehyde	91
3-Butenyne-1	432	Butyl ethyl acetaldehyde	212	3-Chloroallyl chloride	134
Butenyne	432	Butyl ethylene	246	Chloroallylene	16
1-Butoxybutane	123	tert-Butyl ethyl ether	200	Chlorobenzene	92
1-tert-Butoxy-2,3-epoxypropane	55	i-Butyl formate	77	Chlorobenzol	92
2-Butoxyethanol	56	n-Butyl formate	78	1-Chlorobutane	74
2-Butoxyethanol acetate	57	tert-Butyl glycidyl ether	55	3-Chloro-2-butanone	93
2-Butoxyethyl acetate	57	n-Butyl glycol	56	1-Chlorobut-2-ene	94
1-Butoxy-2-hydroxy ethane	56	Butyl glycol acetate	57	3-Chloro-i-butene	275
tert-Butoxymethyloxirane	55	n-Butyl mercaptan	79	1-Chloro-1,1-difluoroethane	95
1-Butoxy-2-propanol	58	tert-Butyl mercaptan	80	Chlorodimethyl ether	98
1-Butoxypropan-2-ol	58	Butyl methacrylate	81	Chlorodimethylsilane	96
2-Butyl acetate	59	n-Butyl methacrylate	81	1-Chloro-2,3-epoxypropane	186
i-Butyl acetate	60	tert-Butyl methane	169	2-Chloro-1-ethanal	91
n-Butyl acetate	61	Butyl methanoate	78	Chloroethane	201
sec-Butyl acetate	59	tert-Butyl methyl ether	282	2-Chloroethan-1-ol	97
tert-Butyl acetate	62	Butyl methyl ketone	244	Chloroethanol	97
i-Butyl acrylate	63	i-Butyl methylketone	283	Chloroethene	433
n-Butyl acrylate	64	i-Butyl-2-methyl propanoate	72	Chloroethyl	201
tert-Butyl acrylate	65	Butyl oxitol	56	2-Chloroethyl alcohol	97
i-Butyl alcohol	47	Butyl-2-propenoate	64	Chloroethylene	433
n-Butyl alcohol	48	tert-Butylpropenoate	65	1-Chloroethyl methyl ketone	93
sec-Butyl alcohol	46	2-Butyne	82	Chloroformic acid ethyl ester	202
tert-Butyl alcohol	49	But-2-yne	82	Chloroformic acid methyl ester	286
Butyl aldehyd	84	i-Butyraldehyde	83	Chloroformyl chloride	346
i-Butyl amine	66	n-Butyraldehyde	84	Chloromethane	285
n-Butylamine	67	Butyric acid aldehyde	84	Chloromethoxymethane	98
sec-Butylamine	68	Butyric acid anitrile	85	Chloromethyl	285

Substance	No	Substance	No	Substance	No
1-Chloro-2-methylbenzene	101	Cyclopentane	110	1,2-Dichloropropane	132
1-Chloro-3-methylbutane	27	Cyclopentane-1-amine	112	1,3-Dichloro-2-propanol	133
Chloromethyl methylether	98	Cyclopentanone	111	1,3-Dichloro-1-propanol	133
Chloromethyl oxirane	186	Cyclopentylamine	112	1,3-Dichloropropene	134
1-Chloro-2-methylpropane	73	Cyclopropane	113	1,3-Dichloropropylene	134
2-Chloro-2-methylpropane	75	Cyclohexane amine	109	Dichlorosilane	135
3-Chloro-2-methylprop-1-ene	275	D6	184	Dicyclohexyl	136
1-Chloropentane	28	DC244 Fluid	331	1,3-Dicyclopentadiene	137
1-Chloropropane	369	DC 246 Fluid	184	Dideuterium	118
2-Chloropropane	368	DCM	131	Diethenyl benzene	182
2-Chloropropene	99	1,3-DCP	133	1,1-Diethoxyethane	138
3-Chloro-1-propene	16	DCP	134	Diethoxy formic acid anhydride	142
2-Chloropropylene	99	DCS	135	Diethoxy methyl silane	139
3-Chloropropylene	16	DEA	140	Diethylacetal	138
2-Chloropropylene oxide	186	DEC	142	Diethylamine	140
Chlorosulfonic acid	100	cis-Decahydronaphthalene	114	N,N-Diethylamine	140
Chlorosulfuric acid	100	cis-Decaline	114	2-Diethylaminoethanol	145
2-Chlorotoluene	101	Decamethyl cyclopentasiloxane	115	2-Diethylaminoethyl alcohol	145
o-Chlorotoluene	101	n-Decane	116	1,2-Diethylbenzene	141
Chlorotrifluoride	90	1-Decene	117	o-Diethylbenzene	141
CHO	108	n-Decylene	117	Diethyl carbinol	344
Cinnamene	383	DEGDDE	143	Diethylcarbitol	143
CMME	98	DEGDME	144	Diethyl carbonate	142
Colamine	190	DEK	147	Diethyldiglycol	143
CP	110	DEMS	139	Diethylene dioxide	174
Crotonaldehyde	50	Deuterium	118	Diethylene ether	174
Crotonic aldehyde	50	Diacetone alcohol	119	Diethylene glycol diethylether	143
Crotonylene	82	Diacetylmethane	6	Diethylene monoxide	390
Crotyl chloride	94	Diamine	249	Diethylene oximide	320
Cumene	102	1,2-Diaminoethane	207	Diethyenglycol dimethylether	144
Cumol	102	1,2-Diaminopropane	372	N,N-Diethylethanamine	412
Cyanoethylene	11	Di-i-amyl ether	120	N,N-Diethylethanolamine	145
Cyanomethane	4	Diazane	249	Diethyl ether	146
1-Cyanopropane	85	Diborane	121	Diethyl ketone	147
Cyclobutane	103	Diboron hexahydride	121	Diethylmethylmethane	304
(Methylethyl)cyclohexane	370	Di-n-butylamine	122	Diethyl oxide	146
Cyclohexane	104	Dibutylamine	122	Diethylsulfide	148
Cyclohexanol	105	N,N-Dibutyl-1-butanamine	406	Diethyl thioether	148
Cyclohexanone	106	Di-i-butylene	424	Difluoro chloroethane	95
Cyclohexatriene	36	Di-n-butylether	123	1,1-Difluoroethane	149
Cyclohexene	107	Dibutylether	123	Difluoromethane	150
3-Cyclohexene-1-aldehyde	389	Dibutyl ketone	328	Diglyme	144
3-Cyclohexene-1-carbaldehyde	389	Di-tert-butyl peroxide	124	Dihexyl	185
Cyclohexene oxide	108	N,N'-Di-tert-butylsilane diamine	70	Dihydro-1,3-dioxol	175
Cyclohexenylethylene	435	1,2-Dichlorobenzene	125	Dihydrogen dioxide	256
Cyclohexyl alcohol	105	ortho-Dichlorobenzene	125	Dihydrogen selenide	257
Cyclohexylamine	109	o-Dichlorobenzol	125	3,4-Dihydro-2-methoxypyrene	268
Cyclohexyl cyclohexane	136	1,1-Dichloroethane	126	1,2-Dihydroxyethane	208
N-Cyclohexyl dimethyl amine	161	1,2-Dichloroethane	127	Diisoamyl ether	120
Cyclohexylethene	434	1,1-Dichloroethene	128	a-Diisobutylene	424
Cyclohexylethylene	434	1,2-Dichloroethene trans	129	Diisopentyl ether	120
Cyclohexyl ketone	106	1,1-Dichloroethylene	128	Diisopropylamine	176
Cyclohexylmethane	287	1,2-Dichloroethylene trans	129	Diisopropylether	179
2-Cyclohexyl-2-methyl propane	76	1,1-Dichloro-1-fluoroethane	130	Diisopropyl oxide	179
2-Cyclohexylpropane	370	1,3-Dichlorohydrin	133	Dimazine	167
Cyclomethicone	115	1,3-Dichloro-2-hydroxypropane	133	Dimethoxy dipropylene glycol	178
Cyclomethicone 6	184	1,3-Dichloroisopropyl alcohol	133	1,2-Dimethoxyethane	151
Cyclopentadiene dimere	137	Dichloromethane	131	Dimethoxy formic acid anhydride	160

Substance	No	Substance	No	Substance	No
Dimethoxymethane	152	N.N-Dimethyl methanamide	154	DME	163
2.2-Dimethoxypropane	153	N.N-Dimethylmethanamide	165	DMEA	164
Dimethyl	188	N.N-Dimethylmethanamine	418	DMF	165
N.N-Dimethyl acetamide	154	Dimethyl methane	352	DMIPA	171
1.1-Dimethyl acetone	309	Dimethylnitromethane	326	DMK	3
Dimethylacetone	147	2.4-Dimethyl-3-oxa-2.4-disilapentane	396	DMPA	172
Dimethyl acetylene	82	Dimethyl oxide	163	DMS	173
Dimethylamine	155	2.3-Dimethylpentane	168	DMSC	96
Dimethylamino cyclohexane	161	N.N-Dimethyl-1-propanamine	172	DnBA	122
2-Dimethylaminoethanol	156	N.N-Dimethyl-1.3-propandiamine	157	Dodecamethyl cyclohexasiloxane	184
1-Dimethyl aminopropane	171	2.2-Dimethyl propane	169	i-Dodecane	341
1-Dimethylaminopropan-2-ol	170	N.N-Dimethyl-1-propane amine	171	n-Dodecane	185
Dimethylaminopropylamine	157	N.N-Dimethyl-i-propanolamine	170	DPDME	178
1.2-Dimethylbenzene	442	Dimethylpropylamine	172	DPGME	271
1.3-Dimethylbenzene	441	N.N-Dimethyl-i-propylamine	171	DS	181
1.4-Dimethylbenzene	443	N.N-Dimethyl-n-propyl amine	172	DTBP	124
2.2-Dimethylbutane	158	1.1-Dimethylpropyl ethyl ether	29	DVB	182
2.3-Dimethylbutane	159	Dimethylpropylmethane	303	DVE	183
1.3-Dimethyl butanol	305	1.1-Dimethyl propylmethyl ether	31	DVTMDS	397
Di-3-methylbutyl ether	120	Dimethylsilyl chloride	96	ECH	186
Dimethylbutylmethane	296	Dimethyl sulfide	173	EDA	207
Dimethyl carbinol	353	Dioform trans	129	EDC	127
Dimethyl carbitol	144	1.4-Dioxa cyclohexane	174	EGBE	56
Dimethyl carbonate	160	1.3-Dioxa cyclopentane	175	EGBEA	57
Dimethylchloroether	98	2.5-Dioxa hexane	151	EGDME	151
Dimethylchlorosilane	96	1.4-Dioxane	174	EGEE	191
N.N-Dimethyl cyclohexyl amine	161	p-Dioxane	174	EGEEA	192
N.N-Dimethyl-1.3-diaminopropane	157	1.3-Dioxolane	175	EGiPE	361
Dimethyl diglycol	144	DIPA	176	EGME	269
Dimethyl dimethoxy methane	153	Di-i-pentyl ether	120	EGnPE	360
Dimethyl disulfide	162	Diplogen	118	2-EHA	213
Dimethylenediamine	207	Di-i-propyl	159	EMA	219
Dimethylene oxide	210	Di-i-propylamine	176	EMC	289
N.N-Dimethylethanamine	164	Di-n-propylamine	177	ENB	216
1.1-Dimethylethane	44	Dipropylamine	177	EO	210
1.1-Dimethyl ethanethiol	80	Dipropylene glycol dimethyl ether	178	Epichlorohydrin	186
1.1-Dimethylethanol	49	Dipropylene glycol methyl ether	271	1.2-Epoxy-3-allyloxypropane	17
N.N-Dimethylethanolamine	156	Dipropylene glycol monomethyl ether	271	1.4-Epoxy-1.3-butadiene	228
Dimethylether	163	Di-i-propyl ether	179	1.2-Epoxybutane	187
Dimethyl ethinyl carbinol	284	Di-n-propyl ether	180	1.4-Epoxybutane	390
(1.1-Dimethylethyl)cyclohexane	76	Dipropyl ether	180	3.4-Epoxybut-1-ene	43
Bis(1.1-dimethylethyl)peroxide	124	N.N-Dipropyl-1-propanamine	428	1.2-Epoxy cyclohexane	108
1.1-Dimethylethylamine	69	Disilane	181	1.2-Epoxyethane	210
Dimethylethylamine	164	2.3-Dithiabutane	162	1.2-Epoxy propane	373
1.1-Dimethylethyl arsine	71	Divinyl	42	2.3-Epoxypropylchloride	186
Dimethyl ethyl carbinol	25	Divinyl benzene	182	EPP	220
1.1-Dimethylethylene	53	Divinylene oxide	228	Erythrene	42
1.2-Dimethylethylene	52	Divinylether	183	ETBE	200
1.1-Dimethylethyl glycidyl ether	55	Divinyloxide	183	ETFBO	194
Dimethylformamide	165	1.3-Divinyl-1.1.3.3-tetramethyldisilazane	397	Ethanal	1
N.N-Dimethylformamide	165	1.3-Divinyltetramethyldisilazane	397	Ethane	188
Dimethylglycol	151	DMA	155	Ethane amine	197
3.4-Dimethyl hexane	166	DMAC	154	Ethancarboxylic acid	358
1.1-Dimethylhydrazine	167	DMAPA	157	1.2-Ethanediamine	207
N.N-Dimethylhydrazine	167	DMC	160	Ethane dichloride	127
unsym-Dimethylhydrazine	167	DMCHA	161	1.2-Ethanediol	208
N.N-Dimethyl-2-hydroxyethylamine	156	DMCPS	115	Ethane-1.2-diol	208
Dimethyl ketone	3	DMDS	162	Ethanethiol	218

Substance	No	Substance	No	Substance	No
Ethanoic acid	2	Ethylidiglyme	143	4-Ethyl-2-methylhexane	291
Ethanoic acid ethyl ester	195	N-Ethyl dimethylamine	164	Ethyl methyl ketone	292
Ethanoic acid methyl ester	273	Ethyl-1,1-dimethyl ethyl ether	200	Ethyl-2-methyl-2-propenoate	219
Ethanoic acid propyl ester	364	Ethyl dimethyl methane	279	Ethyl nitrile	4
Ethanol	189	Ethyl-1,1-dimethylpropyl ether	29	Ethyl orthosilicate	386
Ethanol amine	190	Ethylene	206	Ethyl oxirane	187
Ethanoyl chloride	7	Ethylenecarboxylic acid	10	Ethylpentamethylene	205
Ethene	206	Ethylene chloride	127	1-Ethylpiperidine	220
Ethenyl acetate	431	Ethylene chlorohydrin	97	N-Ethylpiperidine	220
Ethenyl benzene	383	Ethylene cyanide	11	Ethyl propanoate	221
Ethenylcyclohexane	434	Ethylenediamine	207	1-Ethyl-1-propanol	344
4-Ethenyl-1-cyclohexene	435	Ethylene dichloride	127	Ethyl propenoate	196
Ethenyl ethanoate	431	Ethylene glycol	208	Ethylpropionate	221
1-Ethenyl-3-methylbenzene	315	Ethylene glycol dimethyl ether	151	Ethylpropylether	222
1-Ethenyl-4-methylbenzene	316	Ethylene glycol monobutyl ether	56	Ethylpropylketone	245
Ethenyl methylether	437	Ethylene glycol monobutyl ether acetate	57	Ethyl silicate	386
Ethenyl oxirane	43	Ethylene glycol monoethyl ether	191	Ethyl sulfhydrate	218
Ethenyloxyethene	183	Ethylene glycol monoethyl ether acetate	192	Ethyl vinyl ether	223
2-Ethenylpyridine	439	Ethylene glycol monomethyl ether	269	Ethyne	8
Ethenyltrimethoxysilane	440	Ethylene glycol monopropyl ether	360	Ethynyl carbinol	355
Ethine	8	Ethylene imine	209	EtM	218
Ethinyl dimethyl carbinol	284	Ethylene oxide	210	EtOH	189
Ethoxycarbonyl chloride	202	Ethylene trichloride	408	EVE	223
Ethoxy ethane	146	N-Ethylethane amine	140	Fluorine	224
2-Ethoxyethanol	191	Ethyl ethanoate	195	Fluorobenzene	225
2-Ethoxyethanol acetate	192	Ethyl ether	146	Fluoroethene	436
Ethoxyethene	223	Ethylethylene	51	Fluoroethylene	436
2-Ethoxyethyl acetate	192	Ethyl formate	211	Fluoromethane	294
Acetic acid 2-ethoxyethylester	192	Ethylformic acid	358	Formal	152
2-Ethoxy-2-methyl butane	29	Ethyl glycol	191	Formal	152
2-Ethoxy-2-methyl propane	200	Ethyl glycol acetate	192	Formaldehyde	226
1-Ethoxypropane	222	2-Ethylhexaldehyde	212	Formaldehyde dimethylacetal	152
1-Ethoxy-2-propanol	193	Ethylhexamethylene	204	Formaldehyde ethylene acetal	175
1-Ethoxypropan-2-ol	193	2-Ethyl-1-hexanal	212	Formic acid	227
4-Ethoxy-1,1,1-trifluoro-3-buten-2-one	194	2-Ethylhexanal	212	Formic acid butyl ester	78
Ethoxy trifluoro butenone	194	2-Ethyl-1-hexanamine	215	Formic acid dimethylamide	165
Ethyl acetate	195	2-Ethylhexanoic acid	213	Formic acid ethyl ester	211
1-Ethyl acetone	308	2-Ethylhexoic acid	213	Formic acid methyl ester	295
Ethyl acrylate	196	Acrylic acid (2-ethylhexyl)ester	214	Formic acid propylester	374
Ethyl alcohol	189	2-Ethylhexyl acrylate	214	Formic acid-o-triethyl ester	411
Ethyl aldehyde	1	2-Ethyl-1-hexylamine	215	Formic acid-o-trimethyl ester	415
Ethylamine	197	2-Ethylhexylamine	215	Formonitrile	253
Ethylbenzene	198	2-Ethylhexyl-2-propenoate	214	4-Formyl-1-cyclohexene	389
Ethylbenzol	198	Ethylic acid	2	N-Formyldimethylamine	165
Ethylbromide	199	5-Ethylidenebicyclo(2.2.1)hept-2-ene	216	Fural	229
Ethyl-tert-butylether	200	Ethylidene chloride	126	2-Furaldehyde	229
2-Ethyl caproaldehyde	212	Ethylidene diethyl ether	138	Furan	228
2-Ethylcaproic acid	213	Ethylidene fluoride	149	2-Furancarbinol	230
Ethyl carbinol	354	5-Ethylidene-2-norbornene	216	2-Furancarboxyaldehyde	229
Ethyl cellosolve	191	Ethylidene norbornene	216	Furfural	229
Ethylchloride	201	5-Ethylidene-8,9,10-trinorborn-2-ene	216	Furfur alcohol	230
Ethyl chlorocarbonate	202	Ethyl lactate	217	Furfuraldehyde	229
Ethyl chloroformate	202	Ethyl mercaptan	218	Furfuran	228
Ethyl chloromethanoate	202	Ethyl methacrylate	219	Furfuryl alcohol	230
Ethylcyclobutane	203	Ethyl methanoate	211	2-Furylmethanal	229
Ethylcyclohexane	204	Ethyl methyl acrylate	219	2-Furylmethanol	230
Ethylcyclopentane	205	Ethyl methyl carbonate	289	Germane	231
Ethylcyclotetramethylene	203	Ethylmethyl ether	290	Germanium hydride	231

Substance	No	Substance	No	Substance	No
Germanium tetrachloride	232	Hex-2-en	247	iC12	341
Germanium tetrafluoride	233	1-Hexene	246	iC4=	53
Germanium tetrahydride	231	2-Hexene	247	Iodomethane	299
Germanomethane	231	Hex-1-ene	246	IPA	353
Glyceryl trichlorohydrin	409	Hexone	283	IPC	368
Glycidyl allyl ether	17	Hexyl alcohol	243	iPM	375
Glycidyl-tert-butyl ether	55	n-Hexylamine	248	Isoamyl acetate	21
Glycol	208	Hexylene	246	Isoamyl alcohol	23
Glycol chlorohydrin	97	Hexyl hydride	242	Isoamylchloride	27
Glycol dimethylether	151	HF-A	254	Isoamyl ether	120
Glycol monobutyl ether acetate	57	HFC-1234ze	388	Isoamyl formate	30
Glycol monomethyl ether	269	HFC 365mfc	339	Isoamyl hydride	279
Halon 10001	299	HFO-1234ze	388	Isoamyl methyl ketone	277
HCFC 141b	130	HMCTS	239	Isobutanal	83
HCFC 142b	95	HMDS	240	Isobutane	44
Heavy Hydrogen	118	HMDSO	241	Isobutanol	47
Hendecane	430	Hydralin	105	Isobutene	53
1.1.1.3.5.5.5-Heptamethyltrisiloxane	234	Hydrazine	249	Isobutenyl methyl ketone	262
Heptamethyl trisiloxane	234	Hydrobromic acid	251	Isobutyl acetate	60
i-Heptane	297	Hydrochloric acid	252	Isobutyl acrylate	63
i-Heptane	296	Hydrocyanic acid	253	Isobutyl alcohol	47
i-Heptane	168	Hydrofluoric acid	254	Isobutyl amine	66
n-Heptane	235	Hydrogen	250	Isobutyl carbinol	23
3-Heptane carboxylic acid	213	Hydrogen arsenide	35	Isobutyl chloride	73
1-Heptanol	236	Hydrogen bromide	251	Isobutylene	53
Heptan-1-ol	236	Hydrogen carboxylic acid	227	Isobutyl ethanoate	60
2-Heptanone	237	Hydrogen chloride	252	Isobutyl formate	77
Heptan-2-one	237	Hydrogen cyanide	253	Isobutyl isobutyrate	72
1-Heptene	238	Hydrogen dioxide	256	Isobutyl methylketone	283
Hept-1-ene	238	Hydrogen fluoride	254	Isobutyl-2-methyl propanoate	72
Heptyl alcohol	236	Hydrogen iodide	255	Isobutyraldehyde	83
1-Heptylene	238	Hydrogen nitrate	322	Isobutyric acid isobutyl ester	72
Hexahydroaniline	109	Hydrogen peroxide	256	Isobutyric aldehyde	83
Hexahydrobenzene	104	Hydrogen phosphide	347	Isododecane	341
Hexahydrocumene	370	Hydrogen selenide	257	Isodurene	395
Hexahydro-N,N-dimethyl aniline	161	Hydrogen sulfide	258	Isoheptane	297
Hexahydrophenol	105	Hydroiodic acid anhydrous	255	Isoheptane	296
Hexahydropyridine	351	Hydroperoxide	256	Isoheptane	168
Hexahydrostyrene	434	Hydrosulfuric acid	258	Isohexane	304
Hexahydrotoluene	287	1-Hydroxy-2-aminobutane	19	Isohexane	303
Hexalin	105	1-Hydroxybutane	48	Isononane	400
Hexamethyl cyclotrisiloxane	239	2-Hydroxybutane	46	Isononane	422
Hexamethyldisilazane	240	1-Hydroxy-2-butylamine	19	Isononane	291
Hexamethyldisiloxane	241	Hydroxycyclohexane	105	Isooctane	423
Hexamethylene	104	2-Hydroxyethanol	208	Isooctane	166
1-Hexanamine	248	2-Hydroxyethylamine	190	Isooctylamine	215
Hexanaphthene	104	Propanoic acid 2-hydroxy ethylester	217	Isopentane	279
Hexanaphthylene	107	1-Hydroxyheptane	236	Isopentanoic acid	280
i-Hexane	304	1-Hydroxyhexane	243	Isopentanol	23
i-Hexane	303	4-Hydroxy-2-keto-4-methylpentane	119	Isopentanol	281
n-Hexane	242	2-Hydroxymethylfuran	230	Isopentyl acetate	21
1-Hexanol	243	4-Hydroxy-4-methyl-2-pentanone	119	Isopentyl alcohol	23
Hexan-1-ol	243	3-Hydroxypropene	13	Isopentylchloride	27
2-Hexanone	244	Hydroxypropionic acid ethyl ester	217	Isopentyl ether	120
3-Hexanone	245	2-Hydroxy triethylamine	145	Isopentyl formate	30
Hexan-2-one	244	Hydroxytrimethylsilane	426	Isopentyl methyl ketone	277
Hexan-3-one	245	IBA	47	Isoprene	259
Hexanone	106	i-Butyric acid i-butylester	72	Isopropanol	353

Substance	No	Substance	No	Substance	No
Isopropenyl acetate	356	Methane	264	2-Methyl-1,3-butadiene	259
Isopropenyl benzene	317	Methanecarbonitrile	4	1-Methylbutadiene trans	338
Isopropenyl chloride	99	Methanecarboxylic acid	2	2-Methylbutane	279
4-Isopropenyl-1-methyl cyclohexene	261	Methanethiol	300	3-Methylbutanoic acid	280
Isopropoxyethanol	361	Methanoic acid	227	2-Methyl-1-butanol	281
2-Isopropoxy propane	179	Methanoic acid ethyl ester	211	2-Methylbutan-2-ol	25
Isopropyl acetate	363	Methanoic acid methyl ester	295	3-Methylbutan-1-ol	23
Isopropyl acetone	283	Methanoic acid propylester	374	3-Methyl butan-2-one	309
Isopropyl alcohol	353	Methanol	265	3-Methyl-2-butanone	309
Isopropylamine	365	2-MeTHF	318	Methyl-i-butenyl ketone	262
Isopropyl benzene	102	1-Methoxy-2-acetoxypropane	272	3-Methyl butyl acetate	21
Isopropyl carbinol	47	Methoxybenzene	33	2-Methyl butylacrylate	81
Isopropyl chloride	368	3-Methoxy-1-butanol	266	2-Methyl butyl alcohol	281
Isopropylcyclohexane	370	3-Methoxybutanol	266	Methyl-i-butyl carbinol	305
Isopropyl ether	179	Methoxycarbonyl chloride	286	Methyl-i-butylene ketone	262
Isopropyl glycol	361	Methoxycarbonylethylene	274	Methyl-tert-butyl ether	282
Isopropylidene acetone	262	p-Methoxy cyclohexanone	267	3-Methyl-1-butylformate	30
Isopropyl mercaptan	375	4-Methoxy cyclohexanone	267	Methyl butyl ketone	244
Isopropyl methylketone	309	2-Methoxy-3,4-dihydropyran	268	Methyl-i-butylketone	283
Isopropyl nitrate	377	Methoxy dihydropyran	268	2-Methyl-3-butyn-2-ol	284
Isopropyl oxitol	361	Methoxy ethane	290	3-Methyl butynol	284
Isovaleric acid	280	2-Methoxyethanol	269	3-Methylbutyric acid	280
Ketocyclopentane	111	Methoxyethene	437	Methylcarbinol	189
Ketohexamethylene	106	1-Methoxy-2-hydroxypropane	270	Methyl cellosolve	269
Keto pentamethylene	111	Methoxy methane	163	Methyl chloride	285
Ketopropane	3	2-Methoxy-2-methyl butane	31	Methyl chlorocarbonate	286
Lactic acid ethyl ester	217	Methoxy methylchloride	98	Methyl chloroform	407
Lead tetraethyl	260	(2-Methoxymethylethoxy)-1-propanol	271	Methyl chloroformate	286
(R)-(+)-Limonene	261	(2-Methoxymethylethoxy)propanol	271	Methyl chloromethanoate	286
D-Limonene	261	2-Methoxy-1-methylethyl acetate	272	Methylchloromethyl ether	98
MA	276	2-Methoxy-2-methyl propane	282	Methyl cyanide	4
MAK	237	1-Methoxypropane	307	Methylcyclohexane	287
MBK	244	1-Methoxy-2-propanol	270	2(4-Methylcyclohex-3-ene-1-yl)propan-2-ol	385
MCB	92	Methoxy propoxy propanol	271	Methylcyclopentane	288
MCH	287	1-Methoxy-2-propyl acetate	272	Methyl diethoxy silane	139
MCP	288	Methylacetaldehyde	357	Methyl dipropylene glycol	271
MDHP	268	Methyl acetate	273	Methylene acetone	438
MeI	299	Methylacetic acid	358	Methylene chloride	131
MEK	292	Methylacetic anhydride	359	Methylene dichloride	131
MeM	300	Methyl acetone	292	Methylene fluoride	150
p-Mentha-1,8-diene	261	Methyl acetylene	378	Methylene glycol dimethyl ether	152
4-Mentha-1-ene-8-ol	385	Methyl acrylate	274	Methylene oxide	226
MeOH	265	a-Methylacrylic acid	263	4,7-Methylenetetrahydro indene	137
1-Mercaptobutane	79	Methylal	152	Methyl ethanoate	273
Mercaptoethane	218	Methyl alcohol	265	Methylethene	371
Mercaptomethane	300	Methyl aldehyde	226	(1-Methyl ethenyl)benzene	317
1-Mercaptopropane	376	Methylallene	41	Methyl ether	163
Mesitylene	420	2-Methylallyl chloride	275	2-Methyl-2-ethoxy butane	29
Mesityl oxide	262	Methylallylchloride	275	2-Methyl-2-ethoxy propane	200
Metaformaldehyde	427	Methylamine	276	Methyl ethyl carbinol	46
Methacetone	147	4-Methyl-2-amyl alcohol	305	Methyl ethyl carbonate	289
Methacrylic acid	263	Methyl-tert-amylether	31	Methylethylene	371
Methacrylic acid allyl ester	18	Methyl amyl ketone	237	Methyl ethylene oxide	373
Methacrylic acid butylester	81	Methyl-i-amyl ketone	277	Acetic acid 1-methylethyl ester	363
Methacrylic acid ethylester	219	Methyl benzene	405	Nitric acid 1-methylethylester	377
Methacrylic acid methyl ester	301	Methyl benzol	405	Methylethyl ether	290
Methallyl chloride	275	Methylbis(trimethylsiloxy)silane	234	2-Methyl-4-ethylhexane	291
Methanal	226	Methyl bromide	278	Methyl ethyl ketone	292

Substance	No	Substance	No	Substance	No
Methylethylmethane	45	2-Methylpropan-2-ol	49	MMA	301
1-Methylethyl-2-propanamine	176	Methyl propanone	292	MMH	298
Methylethyl sulfide	293	2-Methylprop-1-ene	53	MMS	314
Methylfluoride	294	2-Methylpropene	53	MO	262
Methylfluoroform	413	Methyl propenoate	274	MOB	33
Methyl formate	295	2-Methyl-2-propenoic acid	263	Monoamylamine	26
Methyl glycol	269	2-Methyl-2-propenoic acid butylester	81	Monobromoethane	199
2-Methylhexane	296	2-Methyl-2-propenoic acid ethylester	219	Monobromomethane	278
3-Methylhexane	297	2-Methyl-2-propenoic acid methyl ester	301	Monobutylamine	67
2-Methyl-5-hexanone	277	2-Methyl-2-propenyl-2-propenoate	18	Monobutyl glycol ether	56
5-Methyl-2-hexanone	277	Methylpropionate	306	Monochloroacetaldehyde	91
Methyl hydrazine	298	2-Methyl-2-propionic acid-2-propenyl ester	18	Monochlorobenzene	92
Methyl hydride	264	1-Methylpropyl acetate	59	Monochloroethane	201
Methylhydrogen diethoxy silane	139	2-Methylpropyl acetate	60	Monochloromethane	285
Methyl iodide	299	2-Methyl propyl acrylate	63	Monoethylamine	197
Methyl isobutyl carbinol	305	1-Methyl propylamine	68	Monoethyl glycol ether	191
Methyl isobutyl ketone	283	2-Methylpropyl amine	66	Monofluorobenzene	225
1-Methyl-4-isopropenyl-1-cyclohexene	261	2-Methyl-i-propyl arsine	71	Monoglyme	151
1-Methyl-4-isopropyl-1-cyclohexene-8-ol	385	2-Methylpropyl-i-butyrate	72	Monomethylamine	276
Methyl mercaptan	300	2-Methylpropyl chloride	73	Monomethyl glycol ether	269
Methyl methacrylate	301	1-Methyl propylene glycol-2	270	Monomethylhydrazine	298
N-Methylmethanamine	155	Methyl-n-propylether	307	Monomethylsilane	314
Methylmethane	188	Methylpropylether	307	Monosilane	380
Methyl methanoate	295	2-Methylpropyl formate	77	Morpholine	320
2-Methyl-2-methoxybutane	31	Methyl propyl ketone	308	MPK	308
2-Methyl-2-methoxy propane	282	Methyl-i-propyl ketone	309	MTBE	282
Methyl-2-methyl-2-propenoate	301	2-Methylpyridine	310	MTMS	319
4-Methyl morpholine	302	3-Methylpyridine	311	Muriatic acid	252
N-Methyl morpholine	302	1-Methyl pyrrole	312	MVK	438
Methyl orthosilicate	399	1-Methyl-1H-pyrrole	312	Naphthalene	321
4-Methyl-3-oxa-1-pentanol	361	N-Methyl pyrrole	312	cis-Naphthane	114
Methyloxirane	373	1-Methyl-2-pyrrolidinone	313	Naphthene	104
Methyl oxitol	269	1-Methyl-2-pyrrolidone	313	Naphthyl hydride	321
Methylpentamethylene	288	N-Methyl-2-pyrrolidone	313	NBA	48
2-Methyl pentane	303	N-Methylpyrrolidone	313	NBC	74
3-Methyl pentane	304	Methylsilane	314	NBM	79
4-Methyl-2-pentanol	305	2-Methyl-2-silapropane	425	Neohexane	158
4-Methylpentan-2-ol	305	Methyl silicate	399	Neopentane	169
2-Methyl-2-pentanol-4-one	119	3-Methylstyrene	315	Nitric acid	322
4-Methyl-2-pentanone	283	4-Methylstyrene	316	Nitric oxide	325
4-Methyl-3-penten-2-one	262	a-Methyl styrene	317	Nitroethane	323
4-Methylpent-3-en-2-one	262	m-Methylstyrene	315	Nitrogen dioxide	324
4-Methyl-2-pentyl alcohol	305	p-Methylstyrene	316	Nitrogen monoxide	325
Methyl-tert-pentylether	31	Methyl sulfhydrate	300	Nitrogen peroxide	324
Methyl pentyl ketone	237	2-Methyltetrahydrofuran	318	Nitrogen tetroxide	324
Methyl phenyl ether	33	Methylthioethane	293	2-Nitropropane	326
1-Methyl-1-phenylethylene	317	Methyl thiomethane	173	Nitro-i-propane	326
Methylphenylketone	5	Methyltrimethoxysilane	319	NMM	302
2-Methyl propanal	83	1-Methylvinyl acetate	356	NMP	313
2-Methylpropane	44	1-Methyl-3-vinylbenzene	315	i-Nonane	422
2-Methyl-1-propane amine	66	1-Methyl-4-vinylbenzene	316	i-Nonane	291
2-Methyl-2-propane amine	69	Methylvinyl ether	437	i-Nonane	400
2-Methyl-2-propanethiol	80	Methylvinylketone	438	n-Nonane	327
2-Methylpropane-2-thiol	80	MFB	225	Nonan-5-on	328
Methylpropanoate	306	MiAK	277	5-Nonanone	328
1-Methyl propanol	46	MiBC	305	2,5-Norbornadiene	329
2-Methyl-1-propanol	47	MiBK	283	Norborna-2,5-diene	329
2-Methyl-2-propanol	49	MIPK	309	Norflurane	387

Substance	No	Substance	No	Substance	No
2-NP	326	1-Pentane amine	26	2-Picoline	310
NPA	354	Pentane-2,4-dione	6	3-Picoline	311
nPM	376	Pentanoic acid	343	Picoline	310
NTO	324	i-Pentanoic acid	280	m-Picoline	311
1,7-Octadiene	330	1-Pentanol	24	o-Picoline	310
Octa-1,7-diene	330	3-Pentanol	344	Pimelic ketone	106
Octamethyl cyclotetrasiloxane	331	Pentan-1-ol	24	2-Pinene	350
Octamethyl trisiloxane	332	Pentan-3-ol	344	a-Pinene	350
i-Octane	166	i-Pentanol	23	PIP	351
i-Octane	423	i-Pentanol	281	Piperidine	351
n-Octane	333	n-Pentanol	24	Piperylene	338
i-Octanoic acid	213	tert-Pentanol	25	Piperylene trans	338
1-Octene	334	2-Pentanone	308	PnPGE	362
i-Octylamine	215	3-Pentanone	147	PO	373
1-Octylene	334	Pentan-2-one	308	POCL	348
ODCB	125	Pentan-3-one	147	Propanal	357
Olefiant gas	206	1-Pentene	345	1-Propanamine	366
OMCTS	331	i-Pentyl acetate	21	2-Propanamine	365
OMTSO	332	n-Pentyl acetate	22	Propane	352
7-Oxabicyclo(4.1.0)heptane	108	n-Pentyl alcohol	24	Propane-1,2-diamine	372
Oxacyclohexane	392	Pentylchloride	28	1,2-Propanediol-1-monomethyl ether	270
Oxacyclopentadiene	228	i-Pentylchloride	27	1-Propanethiol	376
Oxane	392	n-Pentylene	345	2-Propanethiol	375
Oxirane	210	Formic acid i-pentylester	30	Propanoic acid	358
Oxitol	191	Ethyl tert-pentyl ether	29	Propanoic acid anhydride	359
Oxol	228	tert-Pentyl ethyl ether	29	Propanoic acid ethylester	221
Oxomethane	226	i-Pentyl formate	30	Propanoic acid methylester	306
1,1'-Oxybis(2-ethoxy-ethane)	143	tert-Pentyl methyl ether	31	Propanoic anhydride	359
1,1'-Oxybis(2-methoxy-ethane)	144	i-Pentyl methyl ketone	277	1-Propanol	354
1,1'-Oxybis(3-methyl-butane)	120	Perhydronaphthalene	114	2-Propanol	353
Oxybis(methoxypropane)	178	PGEE	193	Propan-2-ol	353
1,1'-Oxybisbutane	123	PGME	270	i-Propanol	353
1,1'-Oxybisethane	146	PGMEA	272	n-Propanol	354
1,1'-Oxybisethene	183	Phenoxy methane	33	2-Propanone	3
1,1'-Oxybismethane	163	Phenylamine	32	Propan-2-one	3
1,1'-Oxybispropane	180	Phenyl chloride	92	Propargyl alcohol	355
2,2'-Oxybispropane	179	Phenylethane	198	2-Propenal	9
Oxygen	335	1-Phenylethanone	5	Propene	371
Ozone	336	Phenylethylene	383	2-Propene-1-amine	14
Paracetaldehyde	337	Phenyl fluoride	225	2-Propenenitrile	11
Paraldehyde	337	Phenyl hydride	36	1,2-Propene oxide	373
PCHO	337	Phenyl methane	405	Propenoic acid	10
PDA	372	Phenyl methyl ether	33	Propenoic acid butyl ester	64
PDC	132	Phenylmethylketone	5	Propenoic acid-1,1-dimethylethyl ester	65
(E)-1,3-Penadiene	338	1-Phenylpropane	367	2-Propenoic acid ethyl ester	196
1,3-Pentadiene trans	338	2-Phenyl propane	102	2-Propenoic acid-2-ethylhexyl ester	214
Penta-1,3-diene trans	338	2-Phenyl propene	317	2-Propenoic acid-2-methyl-2-propenyl ester	18
1,1,1,3,3-Pentafluoro butane	339	Phenyl trifluoromethyl ether	414	2-Propenoic acid-2-methylpropyl ester	63
1,1,1,3,3-Pentafluoropropane	340	Phosgene	346	2-Propen-1-ol	13
Pentafluoropropane	340	Phosphine	347	1-Propen-2-ol acetate	356
Pentamethylene	110	Phosphorus chloride	348	Propenyl acetate	12
Pentamethylene imine	351	Phosphorus chloride	349	i-Propenyl acetate	356
Pentamethylene oxide	392	Phosphorus hydride	347	Propenyl alcohol	13
2,2,4,6,6-Pentamethylheptane	341	Phosphorus oxychloride	348	2-Propenylamine	14
2,4-Pentandione	6	Phosphorus oxytrichloride	348	i-Propenyl benzene	317
i-Pentane	279	Phosphorus trichloride	349	i-Propenyl chloride	99
n-Pentane	342	Phosphorus trihydride	347	Acetic acid i-propenyl ester	356
tert-Pentane	169	Phosphoryl chloride	348	2-Propenyl methanoate	12

Substance	No	Substance	No	Substance	No
Propine	378	i-Propylidene acetone	262	RC 270	113
Propionaldehyde	357	1-Propyl mercaptan	376	SBA	46
Propione	147	2-Propyl mercaptan	375	Selane	257
Propionic acid	358	i-Propyl mercaptan	375	Selenium hydride	257
Propionic acid anhydride	359	n-Propyl mercaptan	376	Sextone	106
Propionic acid ethylester	221	Propyl methyl ketone	308	Silaethane	314
Propionic aldehyde	357	i-Propyl methylketone	309	Silane	380
Propionic anhydride	359	i-Propyl nitrate	377	Silicane	380
2-Propoxyethanol	360	N-Propyl-1-propane amine	177	Silicic acid tetraethylester	386
i-Propoxyethanol	361	1-Propyne	378	Silicic acid tetramethylester	399
2-Propoxy-1-methyl ethanol	362	Propyne	378	Silicochloroform	410
1-Propoxypropane	180	2-Propyn-1-ol	355	Silico ethane	181
1-Propoxy-2-propanol	362	Prop-2-yn-1-ol	355	Silicon chloroform	410
1-Propoxypropan-2-ol	362	2-Propynyl alcohol	355	Silicon dichloride	135
2-Propyl acetate	363	Prussic acid	253	Silicon hexahydride	181
i-Propyl acetate	363	Pseudocumene	419	Silicon hydride	380
n-Propyl acetate	364	Pyridine	379	Silicon tetrachloride	381
i-Propyl acetone	283	2-Pyridylethene	439	Silicon tetrafluoride	382
i-Propyl alcohol	353	2-Pyridylethylene	439	Silicon tetrahydride	380
n-Propyl alcohol	354	R1130	129	Silyltrichloride	410
Propyl aldehyde	357	R1130a	128	Stannic chloride	403
1-Propylamine	366	R1140	433	Styrene	383
2-Propylamine	365	R1141	436	Styrol	383
i-Propylamine	365	R1150	206	Sulfane	258
n-Propylamine	366	R1234ze	388	Sulfur dioxide	384
i-Propyl benzene	102	R1270	371	Sulfuretted hydrogen	258
n-Propylbenzene	367	R134a	387	Sulfuric chlorohydrin	100
Propyl carbinol	48	R140a	407	Sulfurous dichloride	402
i-Propyl carbinol	47	R141b	130	Sulfurous oxide	384
n-Propylcarbinyl chloride	74	R142b	95	Sulfurous oxychloride	402
Propyl cellosolve	360	R143a	413	Sulfuryl oxychloride	100
i-Propyl chloride	368	R150	127	TAAE	29
n-Propylchloride	369	R150a	126	TAME	31
Propyl cyanide	85	R152a	149	TBA	49
n-Propyl cyanide	85	R160	201	TBA	65
i-Propylcyclohexane	370	R170	188	TBA	406
Propylene	371	R245fa	340	TBA's	71
Propylene aldehyde	50	R270	132	TBGE	55
Propylene bromide	15	R280	369	tBM	80
Propylenechloride	16	R290	352	TCE	408
1,2-Propylenediamine	372	R30	131	TCS	410
1,2-Propylene dichloride	132	R32	150	TDMAT	394
Propylene glycol methylether acetate	272	R365	339	TEA	412
Propylene glycol monoethyl ether	193	R40	285	TEL	260
Propylene glycol monomethyl ether	270	R40B1	278	Telone	134
Propylene glycol propyl ether	362	R41	294	TeMB	395
Propylene oxide	373	R50	264	TEMED	398
Propylenglycol-1-butylether	58	R600	45	TEOF	411
2-Propylenglycol-1-ethylether	193	R600a	44	TEOS	386
Acetic acid i-propyl ester	363	R610	146	Terpineol	385
Nitric acid i-propylester	377	R611	295	Tetrachlorogermane	232
Ethylene glycol i-propyl ether	361	R630	276	Tetrachlorosilane	381
Propylethylene	345	R631	197	Tetraethoxysilane	386
Propylethylether	222	R 702	250	Tetraethyl lead	260
n-Propylformate	374	R717	20	Tetraethyl orthosilicate	386
Propylglycol	360	R732	335	Tetraethylplumbane	260
i-Propyl glycol	361	R744	86	Tetraethyl silicate	386
Propyl hydride	352	R764	384	1,1,1,2-Tetrafluoro ethane	387

Substance	No	Substance	No	Substance	No
Tetrafluorogermane	233	Titanium dimethylamide	394	Trimethyl orthoformate	415
1.3.3.3-Tetrafluoroprop-1-ene trans	388	Titanium tetrachloride	404	2.2.4-Trimethylpentane	423
Tetrafluorosilane	382	Titanium tetrakis(dimethylammonium)	394	2.4.4-Trimethyl-1-pentene	424
1.2.3.6-Tetrahydrobenzaldehyde	389	TMA	418	1.2.3-Trimethylpropane	304
Tetrahydro benzaldehyde	389	TMB	421	Trimethyl silane	425
1.2.3.4-Tetrahydrobenzene	107	TMDSO	396	Trimethylsilanol	426
Tetrahydrofuran	390	TMOA	417	2.4.6-Trimethyl-1.3.5-trioxane	337
Tetrahydrogermane	231	TMOF	415	1.3.5-Trioxacyclohexane	427
Tetrahydro-4.7-methanoindene	137	TMOS	416	1.3.5-Trioxane	427
Tetrahydro-2-methylfuran	318	TMOS	399	3.6.9-Trioxa undecane	143
1.2.3.4-Tetrahydronaphthalene	391	TMS	401	Trioxymethylene	427
Tetrahydronaphthalene	391	TMS	425	Tri-n-propylamine	428
Tetrahydro-1.4-oxazine	320	TMS	426	Tripropyl amine	428
Tetrahydro-2H-pyran	392	Toluene	405	Tungsten hexafluoride	429
Tetrahydropyran	392	Toluene hexahydride	287	UDMH	167
Tetrahydrosilvan	318	Toluol	405	n-Undecane	430
1.2.5.6-Tetrahydrostyrene	435	o-Tolyl chloride	101	Valeric acid	343
Tetrahydrothiophene	393	Tribromoborane	37	i-Valeric acid	280
Tetrakisdimethylaminotitanium	394	Tributylamine	406	Valerone	328
Tertralin	391	Trichloroborane	38	VAM	431
1.1.3.3-Tetramethyl-1.3-divinylsilazane	397	1.1.1-Trichloroethane	407	VCH	435
Tetramethoxy silane	399	Trichloro ethene	408	VCM	433
Tetramethyl-3-aza-2.4-disilapentane	240	1.1.2-Trichloroethylene	408	VDC	128
1.2.3.5-Tetramethylbenzene	395	Trichloro ethylene	408	VF	436
1.3.4.5-Tetramethylbenzene	395	Trichlorohydrin	409	Vinyl acetate	431
1.1.3.3-Tetramethyldisiloxane	396	Trichlorophosphine	349	Vinylacetylene	432
Tetramethyldivinyl disilazane	397	Trichlorophosphine oxide	348	Vinyl benzene	383
Tetramethylene	103	Trichlorophosphorus oxide	348	Vinyl carbinol	13
Tetramethylene oxide	390	1.2.3-Trichloropropane	409	Vinyl chloride	433
Tetramethylene oxirane	108	Trichlorosilane	410	Vinyl cyanide	11
Tetramethylene sulfide	393	Triethoxymethane	411	Vinylcyclohexane	434
Tetramethyl ethylene diamine	398	Triethylamine	412	4-Vinylcyclohexene	435
Tetramethyl methane	169	Triethyl orthoformate	411	Vinyl ethanoate	431
Tetramethyl orthosilicate	399	Trifluoroanisene	414	2-Vinylethan-1-ol	54
Tetramethyl-3-oxa-2.4-disilapentane	241	Trifluoroborane	39	Vinylether	183
2.2.3.3-Tetramethylpentane	400	1.1.1-Trifluoroethane	413	Vinyl ethyl alcohol	54
Tetramethylsilane	401	Trifluoro methoxy benzene	414	Vinylethylene	42
Tetramethyl silicane	401	1.1.1-Trimethoxyethane	417	Vinylethylene oxide	43
Tetramethyl silicate	399	Trimethoxyethane	417	Vinyl ethyl ether	223
TFMB	414	Trimethoxymethane	415	Vinyl fluoride	436
THB	389	Trimethoxymethylsilane	319	Vinylidene chloride	128
THF	390	Trimethoxysilane	416	Vinylmethyl ether	437
2-Thiabutane	293	Trimethoxy silylene	440	Vinylmethylketone	438
3-Thiapentane	148	Trimethoxy silylhydride	416	2-Vinylpyridine	439
2-Thiapropane	173	Trimethoxy vinylsilane	440	Vinylstyrene	182
1.1'-Thiobisethane	148	Trimethyl-o-acetate	417	3-Vinyltoluene	315
Thiobismethane	173	Trimethylamine	418	4-Vinyltoluene	316
Thiobutyl alcohol	79	1.2.4-Trimethylbenzene	419	m-Vinyltoluene	315
Thiocyclopentane	393	1.3.5-Trimethylbenzene	420	p-Vinyltoluene	316
Thioethyl alcohol	218	2.6.6-Trimethylbicyclo(3.1.1)hept-2-ene	350	Vinyltrimethoxysilane	440
Thiomethanol	300	Trimethyl borane	421	VME	437
Thionyl chloride	402	Trimethyl carbinol	49	VTMOS	440
Thiophane	393	Trimethylchloromethane	75	m-Xylene	441
THP	392	Trimethylene	113	o-Xylene	442
THT	393	2.2.4-Trimethyl hexane	422	p-Xylene	443
Tin chloride	403	Trimethylhydroxysilane	426	m-Xylol	441
Tin tetrachloride	403	Trimethylmethane	44	o-Xylol	442
Titanic chloride	404	Trimethyl orthoacetate	417	p-Xylol	443

Gas / Vapor	No	Gas / Vapor	No	Gas / Vapor	No	Gas / Vapor	No	Gas / Vapor	No
BBr3	37	C2H7ClSi	96	C4H4	432	C4H11N	67	C5H12O2	266
BCl3	38	C2H7N	197	C4H4O	228	C4H11N	140	C5H12O3	417
BF3	39	C2H7N	155	C4H5F5	339	C4H11N	164	C5H12O3Si	440
Br2	40	C2H7NO	190	C4H6	82	C4H11NO	156	C5H13N	26
CCl2O	346	C2H8N2	167	C4H6	42	C4H11NO	19	C5H13N	171
CHN	253	C2H8N2	207	C4H6	41	C4H12O3Si	319	C5H13N	172
CH2Cl2	131	C3H2F4	388	C4H6O	183	C4H12O4Si	399	C5H13NO	170
CH2F2	150	C3H3F5	340	C4H6O	43	C4H12Si	401	C5H14N2	157
CH2O	226	C3H3N	11	C4H6O	50	C4H14OSi2	396	C5H14O2Si	139
CH2O2	227	C3H4	378	C4H6O	438	C5H4O2	229	C6H4Cl2	125
CH3Br	278	C3H4Cl2	134	C4H6O2	274	C5H5N	379	C6H5Cl	92
CH3Cl	285	C3H4O	355	C4H6O2	431	C5H6O2	230	C6H5F	225
CH3F	294	C3H4O	9	C4H6O2	263	C5H7N	312	C6H6	36
CH3I	299	C3H4O2	10	C4H7Cl	94	C5H8	259	C6H7F3O2	194
CH4	264	C3H5Br	15	C4H7Cl	275	C5H8	338	C6H7N	310
CH4O	265	C3H5Cl	16	C4H7ClO	93	C5H8O	284	C6H7N	311
CH4S	300	C3H5Cl	99	C4H7N	85	C5H8O	111	C6H7N	32
CH5N	276	C3H5ClO	186	C4H8	53	C5H8O2	6	C6H10	107
CH6N2	298	C3H5ClO2	202	C4H8	103	C5H8O2	12	C6H10O	108
CH6Si	314	C3H5Cl3	409	C4H8	52	C5H8O2	301	C6H10O	262
CO	87	C3H6	113	C4H8	51	C5H8O2	356	C6H10O	106
CO2	86	C3H6	371	C4H8O	54	C5H8O2	196	C6H10O2	268
C2HCl3	408	C3H6Cl2	132	C4H8O	84	C5H9NO	313	C6H10O2	219
C2H2	8	C3H6Cl2O	133	C4H8O	223	C5H10	345	C6H10O2	17
C2H2Cl2	128	C3H6O	3	C4H8O	390	C5H10	110	C6H10O3	359
C2H2Cl2	129	C3H6O	357	C4H8O	292	C5H10O	147	C6H12	203
C2H2F4	387	C3H6O	373	C4H8O	187	C5H10O	309	C6H12	247
C2H3Cl	433	C3H6O	13	C4H8O	83	C5H10O	308	C6H12	246
C2H3ClF2	95	C3H6O	437	C4H8O2	306	C5H10O	318	C6H12	104
C2H3ClO	91	C3H6O2	273	C4H8O2	174	C5H10O	392	C6H12	288
C2H3ClO	7	C3H6O2	211	C4H8O2	195	C5H10O2	280	C6H12O	283
C2H3ClO2	286	C3H6O2	358	C4H8O2	374	C5H10O2	78	C6H12O	105
C2H3Cl2F	130	C3H6O2	175	C4H8O3	289	C5H10O2	221	C6H12O	244
C2H3Cl3	407	C3H6O3	427	C4H8S	393	C5H10O2	343	C6H12O	245
C2H3F	436	C3H6O3	160	C4H9Cl	75	C5H10O2	364	C6H12O2	61
C2H3F3	413	C3H7Cl	369	C4H9Cl	74	C5H10O2	77	C6H12O2	60
C2H3N	4	C3H7Cl	368	C4H9Cl	73	C5H10O2	363	C6H12O2	59
C2H4	206	C3H7N	14	C4H9NO	320	C5H10O3	142	C6H12O2	119
C2H4Cl2	126	C3H7NO	165	C4H9NO	154	C5H10O3	217	C6H12O2	30
C2H4Cl2	127	C3H7NO2	326	C4H10	44	C5H11Cl	28	C6H12O2	62
C2H4F2	149	C3H7NO3	377	C4H10	45	C5H11Cl	27	C6H12O3	192
C2H4O	1	C3H8	352	C4H10O	48	C5H11N	351	C6H12O3	337
C2H4O	210	C3H8O	353	C4H10O	49	C5H11N	112	C6H12O3	272
C2H4O2	295	C3H8O	290	C4H10O	146	C5H11NO	302	C6H13N	109
C2H4O2	2	C3H8O	354	C4H10O	307	C5H12	169	C6H14	159
C2H5Br	199	C3H8O2	269	C4H10O	47	C5H12	279	C6H14	304
C2H5Cl	201	C3H8O2	152	C4H10O	46	C5H12	342	C6H14	242
C2H5ClO	98	C3H8S	376	C4H10O2	270	C5H12O	282	C6H14	158
C2H5ClO	97	C3H8S	375	C4H10O2	151	C5H12O	281	C6H14	303
C2H5N	209	C3H8S	293	C4H10O2	191	C5H12O	344	C6H14O	200
C2H5NO2	323	C3H9B	421	C4H10O3	415	C5H12O	25	C6H14O	305
C2H6	188	C3H9N	366	C4H10S	79	C5H12O	24	C6H14O	243
C2H6O	189	C3H9N	365	C4H10S	148	C5H12O	23	C6H14O	179
C2H6O	163	C3H9N	418	C4H10S	80	C5H12O	222	C6H14O	31
C2H6O2	208	C3H10N2	372	C4H11As	71	C5H12O2	361	C6H14O	180
C2H6S	218	C3H10OSi	426	C4H11N	68	C5H12O2	193	C6H14O2	362
C2H6S	173	C3H10O3Si	416	C4H11N	69	C5H12O2	360	C6H14O2	138
C2H6S2	162	C3H10Si	425	C4H11N	66	C5H12O2	153	C6H14O2	56

Gas / Vapor	No	Gas / Vapor	No	Gas / Vapor	No	Gas / Vapor	No	Gas / Vapor	No
C6H14O3	144	C7H16	296	C8H18O	123	C10H12	391	F2	224
C6H15N	177	C7H16	235	C8H18O2	124	C10H14	141	F4Ge	233
C6H15N	176	C7H16	168	C8H18O3	143	C10H14	395	F4Si	382
C6H15N	412	C7H16	297	C8H18O3	178	C10H16	261	F6W	429
C6H15N	248	C7H16O	236	C8H19N	215	C10H16	350	HBr	251
C6H15NO	145	C7H16O	29	C8H19N	122	C10H18	114	HCl	252
C6H16N2	398	C7H16O2	58	C8H19NSi2	397	C10H18O	385	HClO3S	100
C6H18OSi2	241	C7H16O3	411	C8H20O4Si	386	C10H20	76	HCl3Si	410
C6H18O3Si3	239	C7H16O3	271	C8H20Pb	260	C10H20	117	HF	254
C6H19NSi2	240	C7H22O2Si3	234	C8H22N2Si	70	C10H22	116	HI	255
C7H5F3O	414	C8H8	383	C8H24N4Ti	394	C10H22O	120	HNO3	322
C7H7Cl	101	C8H8O	5	C8H24O2Si3	332	C10H30O5Si5	115	H2	250
C7H7N	439	C8H10	198	C8H24O4Si4	331	C11H20O2	214	H2Cl2Si	135
C7H8	329	C8H10	442	C9H10	317	C11H24	430	H2O2	256
C7H8	405	C8H10	441	C9H10	315	C12H22	136	H2S	258
C7H8O	33	C8H10	443	C9H10	316	C12H26	341	H2Se	257
C7H10O	389	C8H12	435	C9H12	216	C12H26	185	H3As	35
C7H10O2	18	C8H14	434	C9H12	102	C12H27N	406	H3N	20
C7H12O2	63	C8H14	330	C9H12	420	C12H36O6Si6	184	H3P	347
C7H12O2	64	C8H14O2	81	C9H12	419	ClF3	90	H4Ge	231
C7H12O2	267	C8H16	424	C9H12	367	ClO2	89	H4N2	249
C7H12O2	65	C8H16	204	C9H18	370	Cl2	88	H4Si	380
C7H14	238	C8H16	334	C9H18O	328	Cl2OS	402	H6B2	121
C7H14	287	C8H16O	212	C9H20	422	Cl3OP	348	H6Si2	181
C7H14	205	C8H16O2	213	C9H20	291	Cl3P	349	NO	325
C7H14O	277	C8H16O2	72	C9H20	327	Cl4Ge	232	NO2	324
C7H14O	237	C8H16O3	57	C9H20	400	Cl4Si	381	O2	335
C7H14O2	22	C8H17N	161	C9H21N	428	Cl4Sn	403	O2S	384
C7H14O2	55	C8H18	423	C10H8	321	Cl4Ti	404	O3	336
C7H14O2	21	C8H18	166	C10H10	182	Cl5Sb	34		
C7H15N	220	C8H18	333	C10H12	137	D2	118		

# Product overview

## Transmitters with electrochemical sensors for the detection of toxic gases and oxygen



**Dräger Polytron 7000**  
Intrinsically safe universal transmitter for continuous monitoring of toxic gases and oxygen by means of an electrochemical sensor.



**Dräger Polytron 7000 with Pump**  
Universal transmitter for continuous monitoring of toxic gases and oxygen with an integrated pump module.



**Dräger Polytron 7000 with relay**  
Universal transmitter for continuous monitoring of toxic gases and oxygen with an integrated relay module.



**Dräger Polytron 3000 with display**  
Intrinsically safe low-cost transmitter for continuous monitoring of toxic gases and oxygen.



**Dräger Polytron 3000 without display**  
Intrinsically safe low-cost transmitter for continuous monitoring of toxic gases and oxygen.



**Dräger Polytron 8100**  
Explosion-proof transmitter with electrochemical DrägerSensor for toxic gases and vapours with analogue and digital signal output, display and optional relays.



**Dräger Polytron 5100**  
Explosion-proof 2 wire 4-20-mA transmitter for toxic gases and vapours with display, optional relays and electrochemical DrägerSensor.



**Dräger Polytron 2000**  
Transmitter with pre-calibrated DrägerSensor MEC for continuous monitoring of toxic gases and oxygen for non-explosion proof areas.

# Product overview

## Transmitters with IR-Sensors for the detection of flammable gases and vapors



**Dräger PIR 7000**  
Explosion-proof infrared optical transmitter for the detection of flammable gases and vapours offering virtually drift-free optics and SS 316L stainless steel enclosure.



**Dräger PIR 3000**  
Explosion-proof infrared optical transmitter for the detection of flammable gases and vapours in standard applications.



**Dräger Polytron 8700**  
Explosion-proof transmitter with Dräger PIR 7000 for flammable gases and vapours. With analogue and digital signal output, display and optional relays.



**Dräger Polytron 5700**  
Explosion-proof transmitter for flammable gases and vapours with display, optional relays and Dräger PIR 7000.



**Dräger Polytron 8310**  
Explosion-proof transmitter with DrägerSensor IR for flammable gases and vapours. With analogue and digital signal output, display and optional relays.



**Dräger Polytron 5310**  
Explosion-proof transmitter for flammable gases and vapours with display, optional relays and DrägerSensor IR.



**GS01**  
Intrinsically safe true wireless transmitter for the detection of flammable gases and vapors.

## Transmitters with IR-sensors for the detection of toxic gases



**Dräger PIR 7000**  
Explosion-proof infrared optical transmitter for monitoring of carbon dioxide, suitable for industrial environments.



**Dräger Polytron 8720**  
Explosion-proof transmitter with Dräger PIR 7200 for carbon dioxide. With analogue and digital signal output, display and optional relays.



**Dräger Polytron 5720**  
Explosion-proof transmitter for carbon dioxide with display, optional relays and Dräger PIR 7200.

# Product overview

## Transmitters and sensing heads with catalytic bead sensors



**Dräger PEX 3000**  
Family of low-cost 4-20-mA-transmitters with DrägerSensor Ex PR M DQ or LC M, with internal display and control elements.



**Dräger Polytron SE Ex PR MI DQ**  
Sensing head with DrägerSensor Ex PR M DQ and measuring range 0 to 100 %LEL.



**Dräger Polytron SE Ex LC MI DD**  
Sensing head with DrägerSensor Ex LC M for flammable gases with concentrations lower than 10 %LEL.



**Dräger Polytron SE Ex HT M DQ**  
Sensing head with DrägerSensor Ex HT M DQ and metal enclosure for ambient temperatures up to 150 °C.



**Dräger Polytron 8200**  
Explosion-proof transmitter with DrägerSensor Ex PR NPT DQ or Ex LC NPT for flammable gases and vapours. With analogue and digital signal output, display and optional relays.



**Dräger Polytron 5200**  
Low-cost explosion-proof transmitter for flammable gases with display, optional relays and DrägerSensor Ex PR NPT DQ or Ex LC NPT.

## Electrochemical, infrared-optical and catalytic bead sensors



**DrägerSensor (elch)**  
Electrochemical gas sensor for toxic gases and oxygen, with integrated data memory.



**DrägerSensor AC**  
Electrochemical gas sensor for the leak-detection of corrosive gases..



**DrägerSensor IR**  
Infrared optical sensor with semi-bridge interface and mV-signal for the detection of flammable gases.



**DrägerSensor Ex PR M DQ**  
Catalytic bead sensor (pellistor sensor) for the detection of flammable gas concentrations by way of catalytic reaction ranging up to 100 %LEL.



**Sensor Ex LC M**  
Catalytic bead sensor with integrated electronics for the detection of flammable gas concentrations ranging up to 10 %LEL.

# Product overview

## Transmitters with open path for the detection of selected gases and vapors



**Dräger Polytron Pulsar**  
Open path system for the detection of gas clouds along a line-of-sight of 4 to 200 meters between receiver and transmitter. Robust due to the stainless steel housing.



**Dräger Polytron Pulsar 2**  
Open path system for the detection of gas clouds along a line-of-sight of 4 to 200 meters between receiver and transmitter.



**Dräger Polytron Pulsar Duct Mount**  
Cross duct system for the detection of gas clouds in a duct with a diameter of 1 to 8 meters.



**Dräger Pulsar 7000 Series**  
Open path system for the detection of gas clouds along a line-of-sight of 4 to 200 meters between receiver and transmitter. Robust due to the stainless steel housing.

# List of detectable gases and vapors

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
1	Acetaldehyde		Ethyl aldehyde	44.1	0.78	21	1006	< -20	4.0	4.0	4.0	4.0	4.0	155
	CAS 75-07-0	Aald	Ethanal	1.52 r		70 °F		< -4 °F	(74)	(74)	(74)	(74)	(74)	IIA
	CH <sub>3</sub> CHO	C <sub>2</sub> H <sub>4</sub> O	Acetic aldehyde	141 v		1 ppm = 1.84 mg/m <sup>3</sup>								T4
2	Acetic acid		Ethanoic acid	60.1	1.05	118	16	39	6.0	4.0	4.0	4.0	4.0	485
	CAS 64-19-7		Methanecarboxylic acid	2.07 r		244 °F		102 °F	(150)	(100)	(100)	(100)	(100)	IIA
	CH <sub>3</sub> COOH	C <sub>2</sub> H <sub>4</sub> O <sub>2</sub>	Ethyllic acid			1 ppm = 2.50 mg/m <sup>3</sup>								T1
3	Acetone		Dimethyl ketone	58.1	0.79	56	246	< -20	2.5	2.5	2.5	2.5	2.5	535
	CAS 67-64-1	DMK	Propan-2-one	2.01 r		133 °F	< -4 °F	(61)	(61)	(61)	(61)	IIA	(74)	IIA
	CH <sub>3</sub> COCH <sub>3</sub>	C <sub>3</sub> H <sub>6</sub> O	2-Propanone Ketopropane	115 v		1 ppm = 2.42 mg/m <sup>3</sup>								T1
4	Acetonitrile		Methyl cyanide	41.1	0.78	82	94	2	3.0	3.0	3.0	3.0	3.0	525
	CAS 75-05-8	AN	Ethyl nitrile	1.42 r		180 °F		36 °F	(51)	(51)	(51)	(51)	(51)	IIA
	CH <sub>3</sub> CN	C <sub>2</sub> H <sub>3</sub> N	Cyanomethane Methanecarbonitrile	99 v		1 ppm = 1.71 mg/m <sup>3</sup>								T1
5	Acetophenone		Acetyl benzene	120.2	1.03	202	0.4	77	1.1			1.1		535
	CAS 98-86-2	Aald	Methylphenylketone	4.15 r		396 °F		171 °F	(55)			(55)		IIA
	C <sub>6</sub> H <sub>5</sub> COCH <sub>3</sub>	C <sub>8</sub> H <sub>8</sub> O	1-Phenylethanone Phenylmethylketone			1 ppm = 5.01 mg/m <sup>3</sup>								T1
6	Acetyl acetone		2,4-Pentandione	100.1	0.98	140	9	34	1.7	1.7			1.7	340
	CAS 123-54-6		Pentane-2,4-dione	3.46 r		284 °F		93 °F	(71)	(71)			(71)	IIA
	CH <sub>3</sub> COCH <sub>2</sub> COCH <sub>3</sub>	C <sub>5</sub> H <sub>8</sub> O <sub>2</sub>	Diacetylmethane Aetyl-2-propanone			1 ppm = 4.17 mg/m <sup>3</sup>								T2
7	Acetylchloride		Acetic acid chloride	78.5	1.10	51	309	-4	7.3	5.0		5.0	5.0	390
	CAS 75-36-5		Ethanoyl chloride	2.71 r		124 °F		25 °F	(239)	(164)	(164)	(164)	IIA	IIA
	CH <sub>3</sub> COCl	C <sub>2</sub> H <sub>2</sub>		325 v		1 ppm = 3.27 mg/m <sup>3</sup>								T2
8	Acetylene		Ethine	26.0	Gas	-84	Gas	Gas	2.3	2.3	2.5	2.5	2.3	305
	CAS 74-86-2		Ethyne	0.90 r		-119 °F			(25)	(25)	(27)	(27)	(25)	IIIC
	C <sub>2</sub> H <sub>2</sub>	C <sub>2</sub> H <sub>2</sub>				1 ppm = 1.08 mg/m <sup>3</sup>								T2
9	Acrolein		Acrylic aldehyde	56.1	0.84	52	295	< -20	2.8	2.8	2.8	2.8	2.85	215
	CAS 107-02-8		2-Propenal	1.94 r		126 °F		< -4 °F	(65)	(65)	(65)	(65)	(67)	IIIB
	CH <sub>2</sub> =CHCHO	C <sub>3</sub> H <sub>4</sub> O	Allyl aldehyde	117 v		1 ppm = 2.34 mg/m <sup>3</sup>								T2
10	Acrylic acid		Propenoic acid	72.1	1.05	141	4.3	55	2.4	2.4	2.4	2.4	2.9	395
	CAS 79-10-7		Acroleic acid	2.49 r		286 °F		131 °F	(72)	(72)	(72)	(72)	(87)	IIIB
	CH <sub>2</sub> =CHCOOH	C <sub>3</sub> H <sub>4</sub> O <sub>2</sub>	Ethylenecarboxylic acid			1 ppm = 3.00 mg/m <sup>3</sup>								T2
11	Acrylonitrile		Vinyl cyanide	53.1	0.80	77	117	-5	2.8	2.8	3.0	3.0	2.8	480
	CAS 107-13-1	ACN	Ethylene cyanide	1.83 r		171 °F		23 °F	(62)	(62)	(66)	(66)	(62)	IIIB
	CH <sub>2</sub> =CHCN	C <sub>3</sub> H <sub>3</sub> N	2-Propenenitrile Cyanoethylene	116 v		1 ppm = 2.21 mg/m <sup>3</sup>								T4
12	Allyl acetate		Acetic acid allyl ester	100.1	0.93	103	27	11	1.7	1.7			1.7	375
	CAS 591-87-7		Propenyl acetate	3.46 r		217 °F		52 °F	(71)	(71)			(71)	IIA
	CH <sub>3</sub> COOCH <sub>2</sub> CH=CH <sub>2</sub>	C <sub>5</sub> H <sub>8</sub> O <sub>2</sub>	2-Propenyl methanoate	114 v		1 ppm = 4.17 mg/m <sup>3</sup>								T2
13	Allyl alcohol		2-Propen-1-ol	58.1	0.85	97	24	21	2.5	2.5	2.5	2.5	2.5	375
	CAS 107-18-6	AA	Vinyl carbinol	2.01 r		207 °F		70 °F	(61)	(61)	(61)	(61)	(61)	IIIB
	CH <sub>2</sub> =CHCH <sub>2</sub> OH	C <sub>3</sub> H <sub>6</sub> O	Propenyl alcohol 3-Hydroxypropene	107 v		1 ppm = 2.42 mg/m <sup>3</sup>								T2

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
1	50 (92)	200 (368)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	40 / 100 %LEL // 16000 ppm Gas-Library	
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL // 8000 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			EC	Polytron 7000 and P 8100 OVI	Aald: 50 / 100 / 200 ppm / LDL = 10 ppm	S = 0.3
2	10 (25)	10 (25)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	P 8200 perf. approved with sensor ... DD
			EC	Polytron 7000 and P 8100 AC	Acid: 3 / 10 / 30 ppm / LDL = 0.5 ppm	
3	500 (1210)	1000 (2421)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD
			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL // 7500 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	35 / 100 %LEL // 8750 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL	performance approved
			OP	Polytron Pulsar 2	1 // 4 / 8 LELm	CSF = 0.58 (Propane = 1.00) / LEL = 2.5
4	20 (34)	40 (69)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	60 / 100 %LEL (&)	
5			IR	Polytron 5700 type 334	100 %LEL (&)	
			IR	Polytron 5700 type 334	100 %LEL (&)	
6	30 (125)		CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (\$)	
			IR	Polytron 5700 type 334	100 %LEL (\$)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
7			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison
8		2500c (2708)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD
			EC	Polytron 7000 and P 8100 OVI	C2H2: 20 / 50 / 100 ppm / LDL = 5 ppm	S = 1.1
9	0.09 (0.21)	0.1 (0.23)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	polymerizing/sensor poison
			IR	PIR 7000 type 334, P 8700 type 334	70 / 100 %LEL (&)	
			IR	Polytron 5700 type 334	100 %LEL (&)	
			IR	PIR 7000 type 340, P 8700 type 340	75 / 100 %LEL (&)	
			IR	Polytron 5700 type 340	100 %LEL (&)	
			EC	Polytron 7000 and P 8100 OVI	as MeOH (20 / 50 / 200 ppm)	S = 1.3 (L)
10	10 (30)	2 (6.0)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	polymerizing/sensor poison
			EC	Polytron 7000 and P 8100 OVI	as EO x 10 (20 / 50 / 200 ppm x 10)	S = 0.1 (L)
11	1.2T (2.7)	2 (4.4)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	polymerizing/sensor poison
			EC	Polytron 7000 and P 8100 OV2	ACN: 20 / 50 / 100 ppm / LDL = 5 ppm	S = 0.2
12			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
			EC	Polytron 7000 and P 8100 OVI	as EO (20 / 50 / 200 ppm)	S = 1.0 (L)
13	2 (4.8)	2 (4.8)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			EC	Polytron 7000 and P 8100 OVI	as EO (20 / 50 / 200 ppm)	S = 1.0 (L)

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
14	Allylamine		3-Aminoprop-1-ene	57.1	0.76	53	262	< -20	2.2			2.2		370
	CAS 107-11-9		2-Propene-1-amine	1.97 r		127 °F		< -4 °F	(52)			(52)		
	CH <sub>2</sub> =CHCH <sub>2</sub> NH <sub>2</sub>	C <sub>3</sub> H <sub>7</sub> N	1-Amino propylene 2-Propenylamine	103 v		1 ppm = 2.38 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.42 ppm				T2
15	Acetic acid		3-Bromopropene	121.0	1.40	70	150	-1	4.3			4.4		295
	CAS 64-19-7		Bromoallylene	4.18 r		158 °F		30 °F	(217)			(222)		IIA
	CH <sub>3</sub> COOH	C <sub>3</sub> H <sub>5</sub> Br	Propylene bromide	232 v		1 ppm = 5.04 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.20 ppm				T3
16	Allyl chloride		3-Chloro-1-propene	76.5	0.94	45	398	< -20	3.2	2.9	2.9	2.9	2.9	390
	CAS 107-05-1		3-Chloropropylene	2.01 r		133 °F	158 °F	(61)	< -4 °F	(102)	(92)	(92)	(92)	IIA
	CH <sub>2</sub> =CHCH <sub>2</sub> Cl	C <sub>3</sub> H <sub>5</sub> Cl	Propylenechloride Chloroallylene	162 v		1 ppm = 3.19 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.31 ppm				T2
17	Allylglycidylether		Allyl-2,3-epoxypropylether	114.1	0.97	154	2.6	45	1.3**					249
	CAS 106-92-3	AGE	1,2-Epoxy-3-allyloxypropane	3.94 r		309 °F		113 °F	(62)					II B
	CH <sub>2</sub> =CHCH <sub>2</sub> OC <sub>3</sub> H <sub>5</sub> O	C <sub>6</sub> H <sub>10</sub> O <sub>2</sub>	1-Allyloxy-2,3-epoxypropane Glycidyl allyl ether			1 ppm = 4.75 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.21 ppm				T3
18	Allyl methacrylate		Allyl-2-methyl acrylate	126.2	0.93	140	8	33	1.2					
	CAS 96-05-9	AMA	Methacrylic acid allyl ester	4.36 r		284 °F		91 °F	(63)					
	CH <sub>2</sub> =C(CH <sub>3</sub> ) COOCH <sub>2</sub> CH=CH <sub>2</sub>	C <sub>7</sub> H <sub>10</sub> O <sub>2</sub>	2-Methyl-2-propenyl-2-propenoate 2-Propenoic acid-2-methyl-2-propenyl ester 2-Methyl-2-propionic acid-2-propenyl ester			1 ppm = 5.26 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.19 ppm				
19	2-Aminobutanol		2-Amino-1-butanol	89.1	0.94	173	0.2		1.6**					
	CAS 96-20-8		2-Aminobutan-1-ol	3.08 r		343 °F			(59)					
	C <sub>2</sub> H <sub>5</sub> CH(NH <sub>2</sub> )CH <sub>2</sub> OH	C <sub>4</sub> H <sub>11</sub> NO	1-Hydroxy-2-aminobutane 1-Hydroxy-2-butylamine			1 ppm = 3.71 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.27 ppm				
20	Ammonia		Anhydrous ammonia	17.0	Gas	-33.4	Gas	Gas	15.4	15.0	15.0	15.0	15.0	630
	CAS 7664-41-7		R717	0.59 r		-28 °F			(109)	(106)	(106)	(106)	(106)	IIA
	NH <sub>3</sub>	H <sub>3</sub> N				1 ppm = 3.71 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 1.41 ppm				T1
21	i-Amyl acetate		Isoamyl acetate	130.2	0.87	142	5.3	25	1.0		1.0	1.0		380
	CAS 123-92-2		Acetic acid i-amylester	4.49 r		288 °F		77 °F	(54)		(54)	(54)		IIA
	CH <sub>3</sub> COOC <sub>5</sub> H <sub>11</sub>	C <sub>7</sub> H <sub>14</sub> O <sub>2</sub>	i-Pentyl acetate Isopentyl acetate 3-Methyl butyl acetate	93 v		1 ppm = 5.43 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.18 ppm				T2
22	n-Amyl acetate		n-Pentyl acetate	130.2	0.88	149	5.3	41	1.0	1.0	1.1	1.1	1.0	350
	CAS 628-63-7		Acetic acid n-amyl ester	4.49 r		300 °F		106 °F	-54	-54	-60	-60	-54	IIA
	CH <sub>3</sub> COOC <sub>5</sub> H <sub>11</sub>	C <sub>7</sub> H <sub>14</sub> O <sub>2</sub>	Acetic acid pentyl ester Amyl acetic ester			1 ppm = 5.43 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.18 ppm				T2
23	i-Amyl alcohol		3-Methylbutan-1-ol	88.2	0.81	131	2.7	42	1.2	1.3	1.2	1.2	1.3	340
	CAS 123-51-3		i-Pentanol	3.04 r		268 °F		108 °F	-44	-48	-44	-44	-48	IIA
	(CH <sub>3</sub> ) <sub>2</sub> CH(CH <sub>2</sub> ) <sub>2</sub> OH	C <sub>5</sub> H <sub>12</sub> O	i-Butyl carbinol Isoamyl alcohol Isopentanol Isobutyl carbinol Isopentyl alcohol			1 ppm = 3.68 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.27 ppm				T2

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks	
14			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison	
			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (\$)		
			IR	Polytron 5700 type 334	100 %LEL (\$)		
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)		
			IR	Polytron 5700 type 340	100 %LEL (?)		
			EC	Polytron 7000 and P 8100 NH3 LC	as NH3 x 2 (50 / 100 ppm x 2)		S = 0.45 (L)
			EC	Polytron 7000 and P 8100 OV1	as C3H6 (30 / 50 / 100 ppm)		S = 0.7 (L)
15			EC	Polytron 7000 and P 8100 OV1	as Aald (50 / 100 / 200 ppm)	S = 0.3 (L)	
16	1 (3.2)		CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison	
			IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL // 9600 ppm Gas-Library	performance approved	
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	performance approved	
			IR	PIR 7000 type 340, P 8700 type 340	45 / 100 %LEL // 12800 ppm Gas-Library	performance approved	
			IR	Polytron 5700 type 340	50 + 100 %LEL Gas-Library	performance approved	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)		
			EC	Polytron 7000 and P 8100 OV1	as Aald x 2 (50 / 100 / 200 ppm x 2)	S = 0.15 (L)	
17	5 (24)		EC	Polytron 7000 and P 8100 OV1	as Aald (50 / 100 / 200 ppm)	S = 0.4 (L)	
18			IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL		
			IR	Polytron 5700 type 334	50 + 100 %LEL		
			IR	PIR 7000 type 340, P 8700 type 340	35 / 100 %LEL		
			IR	Polytron 5700 type 340	50 + 100 %LEL		
			IR	PIR 3000, P 5310, P 8310	100 %LEL		
19			IR	PIR 7000 type 334, P 8700 type 334	60 / 100 %LEL (&)		
			IR	Polytron 5700 type 334	100 %LEL (&)		
			IR	PIR 7000 type 340, P 8700 type 340	30 / 100 %LEL		
			IR	Polytron 5700 type 340	50 + 100 %LEL		
20	20 (14)	50 (35)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD	
			EC	Polytron 7000 and P 8100 NH3 HC	300 / 1000 / 1000 ppm / LDL = 30 ppm		
			EC	Polytron 7000 and P 8100 NH3 LC	NH3: 50 / 100 / 300 ppm / LDL = 5 ppm		S = 1.0
			EC	Polytron 7000 and P 8100 NH3 TL	NH3: 50 / 100 / 300 ppm / LDL = 1 ppm		S = 1.0
			EC	Polytron 8100 NH3 FL	NH3: 50 / 100 / 300 ppm / LDL = 1 ppm		S = 1.0 / Polytron 8100 only
			EC	Polytron 5100 NH3 HC	300 + 500 + 1000 ppm		
			EC	Polytron 5100 NH3 LC	50 + 100 + 200 + 300 ppm		
			EC	Polytron 5100 NH3 TL	50 + 100 + 200 + 300 ppm		
			EC	Polytron 3000 NH3 HC	300 or 1000 ppm		
			EC	Polytron 3000 NH3 LC	100 ppm		
EC	Polytron 2000 NH3	200 ppm					
21	50 (271)	100 (543)	CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL		
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)		
			IR	Polytron 5700 type 340	100 %LEL (?)		
22	50 (271)	100 (543)	CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL		
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL		
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL		
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL		
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL		
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)		
23	20 (74)	100 (368)	CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL		
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL // 2400 ppm Gas-Library		
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library		
			IR	PIR 7000 type 340, P 8700 type 340	5 / 100 %LEL // 600 ppm Gas-Library		
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library		
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)		
			EC	Polytron 7000 and P 8100 OV1	as EtOH (100 / 200 / 300 ppm)	S = 0.6	

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
24	n-Amyl alcohol		n-Pentanol	88.2	0.81	138	1.3	43	1.3	1.06		1.2	1.06	320
	CAS 71-41-0		1-Pentanol	3.04 r		127 °F		< -4 °F	(52)			(44)	(39)	IIA
	C <sub>5</sub> H <sub>11</sub> OH	C <sub>5</sub> H <sub>12</sub> O	Pentan-1-ol			1 ppm = 3.68 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.27 ppm				T2
			n-Pentyl alcohol n-Butyl carbinol											
25	tert-Amyl alcohol		2-Methylbutan-2-ol	88.2	0.81	102	16	19	1.3	1.4		1.2	1.4	435
	CAS 75-85-4		Dimethyl ethyl carbinol	3.04 r		158 °F		30 °F	(217)			(44)	(51)	IIA
	(CH <sub>3</sub> ) <sub>2</sub> C(OH)C <sub>2</sub> H <sub>5</sub>	C <sub>5</sub> H <sub>12</sub> O	tert-Pentanol	88 v		1 ppm = 3.68 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.27 ppm				T2
26	n-Amylamine		1-Aminopentane	87.2	0.76	104	31	7	1.3			2.2		
	CAS 110-58-7		Monoamylamine	3.01 r		219 °F		45 °F	(47)			(80)		IIA
	C <sub>5</sub> H <sub>11</sub> NH <sub>2</sub>	C <sub>5</sub> H <sub>13</sub> N	1-Pentane amine	93 v		1 ppm = 3.19 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.28 ppm				
27	i-Amylchloride		-Pentylchloride	106.6	0.89	100		1	1.5				1.6	255
	CAS 107-84-6		1-Chloro-3-methylbutane	3.68 r		212 °F		34 °F	(67)				(71)	IIA
	CH <sub>2</sub> =CHCH <sub>2</sub> OC <sub>3</sub> H <sub>7</sub>	C <sub>5</sub> H <sub>11</sub> Cl	Isoamylchloride			1 ppm = 4.44 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.23 ppm				T3
			Isopentylchloride											
28	n-Amylchloride		Amyl chloride	106.6	0.88	108	32	3	1.4			1.6		255
	CAS 543-59-9		1-Chloropentane	3.68 r		226 °F		37 °F	(62)			(71)		IIA
	C <sub>2</sub> H <sub>5</sub> OC(CH <sub>3</sub> ) <sub>2</sub> C <sub>2</sub> H <sub>5</sub>	C <sub>5</sub> H <sub>11</sub> Cl	Pentylchloride	106 v		1 ppm = 4.84 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.23 ppm				T3
29	tert-Amyl ethyl ether		Ethyl tert-amyl ether	116.2	0.76	102			1.0**					
	CAS 919-94-8	TAE	2-Ethoxy-2-methyl butane	4.01 r		216 °F			(48)					
	C <sub>2</sub> H <sub>5</sub> OC(CH <sub>3</sub> ) <sub>2</sub> C <sub>2</sub> H <sub>5</sub>	C <sub>7</sub> H <sub>16</sub> O	2-Methyl-2-ethoxy butane	95 v		1 ppm = 4.84 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.21 ppm				
			tert-Pentyl ethyl ether											
			Ethyl tert-pentyl ether											
			1,1-Dimethylpropyl ethyl ether											
		Ethyl-1,1-dimethylpropyl ether												
30	i-Amyl formate		Formic acid i-pentylester	116.2	0.88	124	15	22	1.7					320
	CAS 110-45-2		i-Pentyl formate	4.01 r		255 °F		72 °F	(82)					IIA
	HCOOC <sub>5</sub> H <sub>11</sub>	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	3-Methyl-1-butylformate	140 v		1 ppm = 4.84 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.21 ppm				T2
			Isoamyl formate Isopentyl formate											
31	tert-Amyl methyl ether		Isoamyl acetate	102.2	0.77	86	76	-18	1.2	1.18			1.5	345
	CAS 994-05-8	TAME	Acetic acid i-amylester	3.53 r		288 °F		77 °F	(54)		(54)	(54)		IIA
	CH <sub>3</sub> OC(CH <sub>3</sub> ) <sub>2</sub> CH <sub>2</sub> CH <sub>3</sub>	C <sub>6</sub> H <sub>14</sub> O	i-Pentyl acetate	99 v		1 ppm = 4.26 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.23 ppm				T2
			Methyl-tert-pentylether											
			tert-Pentyl methyl ether											
			1,1-Dimethyl propylmethyl ether											
32	Aniline		Aminobenzene	93.1	1.02	184	0.7	76	1.2	1.2	1.3	1.3	1.2	630
	CAS 62-53-3		Benzenamine	3.21 r		363 °F		169 °F	(47)	(47)	(50)	(50)	(47)	IIA
	C <sub>6</sub> H <sub>5</sub> NH <sub>2</sub>	C <sub>6</sub> H <sub>7</sub> N	Phenylamine			1 ppm = 3.88 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.26 ppm				T1
33	Anisole		Propenoic acid	108.1	0.99	154	3.6	41	1.2					475
	CAS 100-66-3	MOB	Acroleic acid	3.73 r		286 °F		106 °F	(54)					IIA
	C <sub>6</sub> H <sub>5</sub> OCH <sub>3</sub>	C <sub>7</sub> H <sub>8</sub> O	Ethylenecarboxylic acid Phenoxy methane			1 ppm = 4.50 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.22 ppm				T1
34	Antimony pentachloride		Antimony-(V)-chloride	299.0	2.33	150	1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	CAS 7647-18-9			10.32 r		302 °F								
	SbCl <sub>5</sub>	Cl <sub>5</sub> Sb				1 ppm = 12.46 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.08 ppm				
35	Arsenic hydride		Hydrogen arsenide	77.9	Gas	-62	Gas	Gas	3.9		5.1			285
	CAS 7784-42-1		Arsine	2.69 r		-80 °F			(127)		(166)			
	AsH <sub>3</sub>	H <sub>3</sub> As	Arsenic trihydride			1 ppm = 3.25 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.31 ppm				T3
36	Benzene		Benzol	78.1	0.88	80	100	-11	1.2	1.2	1.2	1.2	1.2	555
	CAS 71-43-2		Phenyl hydride	2.70 r		176 °F		12 °F	(39)	(39)	(39)	(39)	(39)	IIA
	C <sub>6</sub> H <sub>6</sub>	C <sub>6</sub> H <sub>6</sub>	Cyclohexatriene	66 v		1 ppm = 3.25 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.31 ppm				T1
37	Boron tribromide		Tribromoborane	250.5	2.69	90	72	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	CAS 10294-33-4		Boron bromide	8.65 r		194 °F								
	BBr <sub>3</sub>	BBr <sub>3</sub>				1 ppm = 10.44 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.10 ppm				

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
24	20 (74)		CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	S = 0.3 (L)
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			EC	Polytron 7000 and P 8100 OV1	as Aald (50 / 100 / 200 ppm)	
25	20 (74)	100 (368)	IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (\$)	
			IR	Polytron 5700 type 334	100 %LEL (\$)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
26			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
27			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
28			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
29			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
30			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
31			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	15 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
32	2 (7.8)	5 (19)	IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
33			IR	PIR 7000 type 334, P 8700 type 334	40 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	35 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
34			EC	Polytron 7000 and P 8100 AC	Acid: 3 / 10 / 30 ppm / LDL = 0.5 ppm	S = 5.0
			EC	Polytron 7000 and P 8100 HCl	AnPC: 5 / 10 / 20 ppm / LDL = 0.2 ppm	
35	0.005 (0.016)	0.05 (0.16)	EC	Polytron 7000 and P 8100 Hydrides	AsH3: 0.3 / 1 / 20 ppm / LDL = 0.03 ppm	S = 0.85
			EC	Polytron 7000 and P 8100 Hydrides SC	AsH3: 0.3 / 1 / 1 ppm / LDL = 0.01 ppm	S = 0.65
			EC	Polytron 7000 and P 8100 PH3/AsH3	AsH3: 0.3 / 1 / 20 ppm / LDL = 0.02 ppm	S = 0.5
36	0.6T (2.0)	1 (3.3)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD
			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL // 3600 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
37		1c (10)	EC	Polytron 7000 and P 8100 AC	Acid: 3 / 10 / 30 ppm / LDL = 0.5 ppm	
			EC	Polytron 7000 and P 8100 HCl	as BCl3 (5 / 10 / 20 ppm)	

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
38	Boron trichloride		Trichloroborane	117.2	Gas	12.6	Gas	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 10294-34-5		Boron chloride	4.05 r		55 °F								
	BCl <sub>3</sub>	BCl <sub>3</sub>				1 ppm = 4.88 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.20 ppm				
39	Boron trifluoride		Trifluoroborane	67.8	Gas	-100	Gas	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 7637-07-2		Boron fluoride	2.34 r		-148 °F								
	BF <sub>3</sub>	BF <sub>3</sub>				1 ppm = 2.83 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.35 ppm				
40	Bromine			159.8	3.12	58.8	220	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 7726-95-6			5.52 r		158 °F								
	Br <sub>2</sub>	Br <sub>2</sub>				1 ppm = 6.66 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.15 ppm				
41	1,2-Butadiene		Methylallene	54.1	Gas	10.8	Gas	Gas	1.6					340
	CAS 590-19-2			1.87 r		51 °F		34 °F	(67)					
	H <sub>2</sub> C=C=CHCH <sub>3</sub>	C <sub>4</sub> H <sub>6</sub>				1 ppm = 2.25 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.44 ppm				T2
42	1,3-Butadiene		Erythrene	54.1	Gas	-5	Gas	Gas	1.4	1.4	2.0	2.0	1.4	415
	CAS 106-99-0	C4=	Vinylethylene	1.87 r		23 °F			(32)	(32)	(45)	(45)	(32)	II B
	CH <sub>2</sub> =CH-CH=CH <sub>2</sub>	C <sub>4</sub> H <sub>6</sub>	Divinyl			1 ppm = 2.25 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.44 ppm				T2
			Biethylene											
43	1,3-Butadiene monoxide		3,4-Epoxybut-1-ene	70.1	0.87	66		<-20	0.95*					430
	CAS 930-22-3		Ethenyl oxirane	2.42 r		151 °F		<-4 °F	-28					
	H <sub>2</sub> C=CH-CHCH <sub>2</sub> O	C <sub>4</sub> H <sub>6</sub> O	Vinylethylene oxide			1 ppm = 2.92 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.34 ppm				T2
44	i-Butane		Isobutane	58.1	Gas	-12	Gas	Gas	1.5	1.3	1.6	1.8	1.3	460
	CAS 75-28-5		2-Methylpropane	2.01 r		10 °F		77 °F	(36)	(31)	(39)	(44)	(31)	II A
	(CH <sub>3</sub> ) <sub>3</sub> CH	C <sub>4</sub> H <sub>10</sub>	Trimethylmethane			1 ppm = 2.42 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.41 ppm				T1
			1,1-Dimethylethane											
			R600a											
45	n-Butane		Methylethylmethane	58.1	Gas	-0.5	Gas	Gas	1.4	1.4	1.6	1.9	1.4	365
	CAS 106-97-8		R600	2.01 r		31 °F			-34	-34	-39	-46	-34	II A
	C <sub>4</sub> H <sub>10</sub>	C <sub>4</sub> H <sub>10</sub>				1 ppm = 2.42 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.41 ppm				T2
46	2-Butanol		sec-Butyl alcohol	74.1	0.81	99	17	23	1.7	1.7	1.7	1.7		390
	CAS 78-92-2	SBA	Butan-2-ol	2.56 r		210 °F		73 °F	(52)	(52)	(52)	(52)		II B
	C <sub>2</sub> H <sub>5</sub> CH(OH)CH <sub>3</sub>	C <sub>4</sub> H <sub>10</sub> O	Methyl ethyl carbinol	97 v		1 ppm = 3.09 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.32 ppm				T2
			2-Hydroxybutane											
			1-Methyl propanol											
47	i-Butanol		Isobutanol	74.1	0.80	108	12	27	1.4	1.4	1.7	1.7	1.7	430
	CAS 78-83-1	IBA	Isobutyl alcohol	2.56 r		210 °F		81 °F	(43)	(43)	(52)	(52)	(52)	II A
	(CH <sub>3</sub> ) <sub>2</sub> CHCH <sub>2</sub> OH	C <sub>4</sub> H <sub>10</sub> O	i-Butyl alcohol	81 v		1 ppm = 3.09 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.32 ppm				T2
			2-Methyl-1-propanol											
			i-Propyl carbinol											
			Isopropyl carbinol											
48	n-Butanol		1-Butanol	74.1	0.81	118	7	35	1.4	1.4	1.4	1.4	1.7	325
	CAS 71-36-3	NBA	Butan-1-ol	2.56 r		210 °F		95 °F	(43)	(43)	(43)	(43)	(52)	II B
	C <sub>4</sub> H <sub>9</sub> OH	H <sub>10</sub> O	n-Butyl alcohol			1 ppm = 3.09 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.32 ppm				T2
			Propyl carbinol											
			1-Hydroxybutane											

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
38			EC	Polytron 7000 and P 8100 AC	BCI3: 3 / 10 / 10 ppm / LDL = 0.5 ppm	S = 3.0
			EC	Polytron 7000 and P 8100 HCl	BCI3: 5 / 10 / 20 ppm / LDL = 0.2 ppm	
			EC	Polytron 3000 BCl3	10 ppm	
			EC	Polytron 3000 AC	3 or 10 ppm	
39	0.35 (0.99)	1c (2.8)	EC	Polytron 7000 and P 8100 AC	BF3: 3 / 10 / 30 ppm / LDL = 0.5 ppm	
40	0.1 (0.67)	0.1 (0.67)	EC	Polytron 7000 and P 8100 Cl2	Br2: 1 / 10 / 100 ppm / LDL = 0.05 ppm	S = 1.0
41			IR	PIR 7000 type 334, P 8700 type 334	40 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
41			IR	PIR 7000 type 340, P 8700 type 340	30 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
42	2T (4.5)	1 (2.3)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD
			IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL // 4900 ppm Gas-Library	
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
42			EC	Polytron 7000 and P 8100 OVI	BTD: 20 / 50 / 200 ppm / LDL = 5 ppm	S = 1.2
43			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (\$)	
			IR	Polytron 5700 type 334	100 %LEL (\$)	
44	1000 (2421)	800 (1937)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved performance approved performance approved performance approved performance approved
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL // 2600 ppm Gas-Library	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL // 1040 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
45	1000 (2421)	800 (1937)	OP	Polytron Pulsar 2	1 // 4 / 8 LELm	CSF = 1.07 (Propane = 1.00) / LEL = 1.5
			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL // 2800 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	5 / 100 %LEL // 700 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	performance approved
46		150 (463)	IR	PIR 3000, P 5310, P 8310	100 %LEL	performance approved
			OP	Polytron Pulsar 2	1 // 4 / 8 LELm	CSF = 0.95 (Propane = 1.00) / LEL = 1.4
			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
47	100 (309)	100 (309)	IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL // 3500 ppm Gas-Library	
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL // 1120 ppm Gas-Library	
48	100 (309)	100 (309)	IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL // 3500 ppm Gas-Library	
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	5 / 100 %LEL // 700 ppm Gas-Library	
48			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			EC	Polytron 7000 and P 8100 OVI	as EtOH (100 / 200 / 300 ppm)	S = 0.65

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
49	tert-Butanol		tert-Butyl alcohol	74.1	0.79	83	41	11	1.4		2.4	2.4		470
	CAS 75-65-0	TBA	2-Methyl-2-propanol	2.56 r		181 °F		52 °F	(43)		(74)	(74)		IIA
	(CH <sub>3</sub> ) <sub>3</sub> COH	C <sub>4</sub> H <sub>10</sub> O	Trimethyl carbinol	82 v		1 ppm = 3.09 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.32 ppm			T1
			1,1-Dimethylethanol 2-Methylpropan-2-ol											
50	2-Butenal		Crotonaldehyde	70.1	0.85	102	24	8	2.1			2.1	2.1	230
	CAS 123-73-9		Crotonic aldehyde	2.34 r		-148 °F					(61)	(61)		II B
	CH <sub>3</sub> CH=CHCHO	C <sub>4</sub> H <sub>6</sub> O	Propylene aldehyde			1 ppm = 2.92 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.34 ppm			T3
51	1-Butene		1-Butylene	56.1	Gas	-6	Gas	Gas	1.5	1.6		1.6	1.6	360
	CAS 106-98-9	C4=	But-1-ene	1.94 r		21 °F			(35)	(37)		(37)	(37)	IIA
	C <sub>2</sub> H <sub>5</sub> CH=CH <sub>2</sub>	C <sub>4</sub> H <sub>8</sub>	Ethylethylene			1 ppm = 2.34 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.43 ppm			T2
52	2-Butene		2-Butylene	56.1	Gas	1	Gas	Gas	1.6				1.6	325
	CAS 107-01-7	C4=	1,2-Dimethylethylene	1.94 r		34 °F			(37)			(37)	(37)	II B
	CH <sub>3</sub> CH=CHCH <sub>3</sub>	C <sub>4</sub> H <sub>8</sub>				1 ppm = 2.34 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.43 ppm			T2
53	i-Butene		Isobutene	56.1	Gas	-7	Gas	Gas	1.6	1.6		1.8	1.6	465
	CAS 115-11-7	iC4=	i-Butylene	1.87 r		23 °F			(37)	(37)		(42)	(37)	IIA
	(CH <sub>3</sub> ) <sub>2</sub> C=CH <sub>2</sub>	C <sub>4</sub> H <sub>8</sub>	Isobutylene			1 ppm = 2.34 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.43 ppm			T2
			2-Methylpropene 2-Methylprop-1-ene 1,1-Dimethylethylene											
54	3-Butene-1-ol		Allylcarbinol	72.1	0.84	112		32	2.0			4.7		
	CAS 627-27-0		2-Vinylethan-1-ol	2.49 r		234 °F		90 °F	(60)			(141)		II B
	CH <sub>2</sub> =CH(CH <sub>2</sub> ) <sub>2</sub> OH	C <sub>4</sub> H <sub>8</sub> O	Vinyl ethyl alcohol			1 ppm = 3.00 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.33 ppm			
55	1-tert-Butoxy-2,3-epoxypropane		tert-Butyl glycidyl ether	130.2	0.91	151	2.5	41	1.1**					
	CAS 7665-72-7	TBGE	Glycidyl-tert-butyl ether	4.49 r		304 °F		106 °F	(60)					
	CH <sub>2</sub> OCHCH <sub>2</sub> OC(CH <sub>3</sub> ) <sub>3</sub>	C <sub>7</sub> H <sub>14</sub> O <sub>2</sub>	tert-Butoxymethyloxirane .1-Dimethylethyl glycidyl ether			1 ppm = 5.43 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.18 ppm			
56	2-Butoxyethanol		Ethylene glycol monobutyl ether	118.2	0.90	171	1.2	61	1.1	1.1	1.1	1.1		240
	CAS 111-76-2	EGBE	Monobutyl glycol ether	4.08 r		210 °F		142 °F	(54)	(54)	(54)	(54)		II B
	C <sub>4</sub> H <sub>9</sub> OC <sub>2</sub> H <sub>4</sub> OH	C <sub>6</sub> H <sub>14</sub> O <sub>2</sub>	n-Butyl glycol Butyl cellosolve 1-Butoxy-2-hydroxy ethane Butyl oxitol			1 ppm = 4.93 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.20 ppm			T2
			2-Butoxyethanol acetate	160.2	0.94	192	0.31	74	1.0	0.9	0.88	0.88		355
57			Ethylene glycol monobutyl ether acetate	5.53 r		378 °F		165 °F	(67)	(60)	(59)	(59)		II B
	CAS 112-07-2	EGBEA	Butyl glycol acetate			1 ppm = 6.68 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.15 ppm			T2
	CH <sub>3</sub> COOC <sub>2</sub> H <sub>4</sub> OC <sub>4</sub> H <sub>9</sub>	C <sub>8</sub> H <sub>16</sub> O <sub>3</sub>	Glycol monobutyl ether acetate Acetic acid-2-butoxyethyl ester Butyl cellosolve acetate 1-Acetoxy-2-butoxyethane											
			1-Butoxy-2-propanol	132.2	0.88	170	1.3	59	0.9			4.7		260
58	CAS 5131-66-8	2PGIBE	1-Butoxypropan-2-ol	4.56 r		388 °F		138 °F	(50)					II B
	C <sub>4</sub> H <sub>9</sub> -O-CH <sub>2</sub> CH(OH)CH <sub>3</sub>	C <sub>7</sub> H <sub>16</sub> O <sub>2</sub>				1 ppm = 5.51 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.18 ppm			T3

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
49	20 (62)	100 (309)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL // 3500 ppm Gas-Library	
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL // 2100 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
50		2 (5.8)	CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (\$)	
			IR	Polytron 5700 type 334	100 %LEL (\$)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
			EC	Polytron 7000 and P 8100 OVI	as C3H6 x 0.5 (30 / 50 / 100 ppm x 0.5)	S = 1.4 (L)
51			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL // 3200 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL // 2400 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
52			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
53			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL // 3200 ppm Gas-Library	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL // 2400 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
54			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
55			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
56	10 (49)	50 (246)	IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL // 2200 ppm Gas-Library	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	5 / 100 %LEL // 550 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			EC	Polytron 7000 and P 8100 OVI	as EtOH (100 / 200 / 300 ppm)	S = 0.65
57	20 (134)	20 (134)	IR	PIR 7000 type 334, P 8700 type 334	50 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
58			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
59	2-Butyl acetate		sec-Butyl acetate	116.2	0.87	112	25	16	1.3	1.3	1.7	1.7		410
	CAS 105-46-4		1-Methylpropyl acetate	4.01 r		234 °F		61 °F	(63)	(63)	(82)	(82)		IIA
	CH <sub>3</sub> COOCH(CH <sub>2</sub> )C <sub>2</sub> H <sub>5</sub>	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	Acetic acid sec butyl ester	108 v		1 ppm = 4.84 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.21 ppm				T2
60	i-Butene		Isobutyl acetate	116.2	0.87	118	20	18	1.3		1.3	1.3		420
	CAS 115-11-7		2-Methylpropyl acetate	4.01 r		244 °F		64 °F	(63)		(63)	(63)		IIA
	CH <sub>3</sub> COOCH <sub>2</sub> CH(CH <sub>3</sub> ) <sub>2</sub>	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	Acetic acid i-butylester	108 v		1 ppm = 4.84 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.21 ppm				T2
			Acetic acid-2-methylpropyl ester i-Butyl ethanoate Isobutyl ethanoate											
61	n-Butyl acetate		Acetic acid butylester	116.2	0.88	127	11	27	1.2	1.2	1.7	1.3	1.3	390
	CAS 123-86-4	BuAc	n-Butyl ethanoate	4.01 r		261 °F		81 °F	(58)	(58)	(82)	(63)	(63)	IIA
	CH <sub>3</sub> COOC <sub>4</sub> H <sub>9</sub>	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>		99 v		1 ppm = 4.84 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.21 ppm				T2
62	tert-Butyl acetate		Acetic acid tert-butyl ester	116.2	0.86	97	41	1	1.3	1.3	1.5	1.7		435
	CAS 540-88-5		tert-Butyl ethanoate	4.01 r		207 °F		34 °F	(63)	(63)	(73)	(82)		IIA
	CH <sub>3</sub> COOC(CH <sub>3</sub> ) <sub>3</sub>	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	Acetic acid-1,1-dimethyl ethylester	110 v		1 ppm = 4.84 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.21 ppm				
63	i-Butyl acrylate		Isobutyl acrylate	128.2	0.89	132	8.8		1.2*					
	CAS 106-63-8		Acrylo-i-butyl ester	4.43 r		270 °F			(64)					
	CH <sub>2</sub> =CHCOOC <sub>4</sub> H <sub>9</sub>	C <sub>7</sub> H <sub>12</sub> O <sub>2</sub>	2-Methyl propyl acrylate 2-Propenoic acid-2-methylpropyl ester Propenoic acid i-butylester			1 ppm = 5.34 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.19 ppm				
64	n-Butyl acrylate		Acrylobutyl ester	128.2	0.90	148	5.3	37	1.2	1.2	1.5	1.5	1.2	275
	CAS 141-32-2		Propenoic acid butyl ester	4.43 r		298 °F		99 °F	(64)	(64)	(80)	(80)	(64)	IIIB
	CH <sub>2</sub> =CHCOOC <sub>4</sub> H <sub>9</sub>	C <sub>7</sub> H <sub>12</sub> O <sub>2</sub>	Butyl-2-propenoate			1 ppm = 5.34 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.19 ppm				T3
65	tert-Butyl acrylate		Propenoic acid-1,1-dimethylethyl ester	128.2	0.88	117	16	17	1.2					
	CAS 1663-39-4	TBA	tert-Butylpropenoate	4.43 r		243 °F		63 °F	(64)					
	CH <sub>2</sub> =CHCOOC(CH <sub>3</sub> ) <sub>3</sub>	C <sub>7</sub> H <sub>12</sub> O <sub>2</sub>	Acrylic acid tert-butylester Acrylo-tert-butyl ester	109 v		1 ppm = 5.34 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.19 ppm				
66	i-Butyl amine		Isobutyl amine	73.1	0.76	66	149	-13	1.9	1.47		3.4	1.47	370
	CAS 78-81-9		2-Methylpropyl amine	2.52 r		270 °F			(64)			(104)	(45)	IIA
	(CH <sub>3</sub> ) <sub>2</sub> CHCH <sub>2</sub> NH <sub>2</sub>	C <sub>4</sub> H <sub>11</sub> N	2-Methyl-1-propane amine 1-Amino-2-methylpropane	114 v		1 ppm = 3.05 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.33 ppm				T2
67	n-Butylamine		1-Aminobutane	73.1	0.74	78	95	-14	1.7	1.7	1.7	1.7	1.7	310
	CAS 109-73-9		1-Butane amine	2.52 r		172 °F		7 °F	(52)	(52)	(52)	(52)	(52)	IIA
	C <sub>4</sub> H <sub>9</sub> NH <sub>2</sub>	C <sub>4</sub> H <sub>11</sub> N	Monobutylamine	105 v		1 ppm = 3.05 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.33 ppm				T2
68	sec-Butylamine		2-Aminobutane	73.1	0.72	63	181	-20	1.7					
	CAS 13952-84-6	B2A	2-Butane amine	2.52 r		145 °F		-4 °F	(52)					IIA
	C <sub>2</sub> H <sub>5</sub> CH(CH <sub>3</sub> )NH <sub>2</sub>	C <sub>4</sub> H <sub>11</sub> N	1-Methyl propylamine	108 v		1 ppm = 3.05 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.33 ppm				

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
59	62 (300)	200 (968)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (?)	
			IR	Polytron 5700 type 334	100 %LEL (?)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
60	62 (300)	150 (726)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
61	62 (300)	150 (726)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD
			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL // 3250 ppm Gas-Library	
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL // 1950 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
62	42 (203)	200 (968)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (?)	
			IR	Polytron 5700 type 334	100 %LEL (?)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
63			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (?)	
			IR	Polytron 5700 type 334	100 %LEL (?)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
			EC	Polytron 7000 and P 8100 OVI	as Aald x 2 (50 / 100 / 200 ppm x 2)	
64	2 (II)	10 (53)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	polymerizing/sensor poison
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL // 2400 ppm Gas-Library	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL // 1200 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
65			EC	Polytron 7000 and P 8100 OVI	as Aald x 2 (50 / 100 / 200 ppm x 2)	S = 0.15 (L)
			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
66	2 (6.1)		CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
67	2 (6.1)	5c (15)	CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
68	2 (6.1)		CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
69	tert-Butylamine		2-Amino-2-methylpropane	73.1	0.70	45	394	<-30	1.7			1.7		380
	CAS 75-64-9		2-Methyl-2-propane amine	2.52 r		113 °F		<-22 °F	(52)			(52)		IIA
	(CH <sub>3</sub> ) <sub>3</sub> CNH <sub>2</sub>	C <sub>4</sub> H <sub>11</sub> N	1,1-Dimethylethylamine	III v		1 ppm = 3.05 mg/m <sup>3</sup>						1 mg/m <sup>3</sup> = 0.33 ppm		T2
70	Bis(tert-butylamino) silane		N,N'-Di-tert-butylsilane diamine	174.4	0.82	166	1.5		0.5*					
	CAS 186598-40-3	BTBAS		4.01 r		331 °F		64 °F	(36)					
	((CH <sub>3</sub> ) <sub>3</sub> CNH) <sub>2</sub> SiH <sub>2</sub>	C <sub>8</sub> H <sub>22</sub> N <sub>2</sub> Si				1 ppm = 7.27 mg/m <sup>3</sup>						1 mg/m <sup>3</sup> = 0.14 ppm		
71	tert-Butyl arsine		2-Methyl-i-propyl arsine	134.1	1.08	68	166							
	CAS 4262-43-5	TBAAs	1,1-Dimethylethyl arsine	4.63 r		154 °F								
	(CH <sub>3</sub> ) <sub>3</sub> CAsH <sub>2</sub>	C <sub>4</sub> H <sub>11</sub> As				1 ppm = 5.59 mg/m <sup>3</sup>						1 mg/m <sup>3</sup> = 0.18 ppm		
72	i-Butyl-i-butyrate		i-Butyric acid i-butylester	144.2	0.85	147	4	37		0.8		0.96	0.8	430
	CAS 97-85-8		2-Methylpropyl-i-butyrate	4.98 r		297 °F		99 °F		(48)		(58)	(48)	IIA
	(CH <sub>3</sub> ) <sub>2</sub> CHCOOCH- CH(CH <sub>3</sub> ) <sub>2</sub>	C <sub>8</sub> H <sub>16</sub> O <sub>2</sub>	i-Butyl-2-methyl propanoate			1 ppm = 6.01 mg/m <sup>3</sup>						1 mg/m <sup>3</sup> = 0.17 ppm		T2
			Isobutyl isobutyrate											
			Isobutyric acid isobutyl ester											
			Isobutyl-2-methyl propanoate											
73	i-Butyl chloride		Isobutyl chloride	92.6	0.88	69	158	-21	2.0	2.0		2.0	2.0	416
	CAS 513-36-0		1-Chloro-2-methylpropane	3.20 r		156 °F		-6 °F	(77)	(77)		(77)	(77)	IIA
	(CH <sub>3</sub> ) <sub>2</sub> CHCH <sub>2</sub> Cl	C <sub>4</sub> H <sub>9</sub> Cl	2-Methylpropyl chloride	131 v		1 ppm = 3.86 mg/m <sup>3</sup>						1 mg/m <sup>3</sup> = 0.26 ppm		T2
74	n-Butyl chloride		Butylchloride	92.6	0.89	78	112	-12	1.8	1.8		1.8	1.8	245
	CAS 1663-39-4	NBC	1-Chlorobutane	3.20 r		172 °F		10 °F	(69)	(69)		(69)	(69)	IIA
	C <sub>4</sub> H <sub>9</sub> Cl	C <sub>4</sub> H <sub>9</sub> Cl	n-Propylcarbonyl chloride	117 v		1 ppm = 3.86 mg/m <sup>3</sup>						1 mg/m <sup>3</sup> = 0.26 ppm		T3
75	tert-Butylchloride		2-Chloro-2-methylpropane	92.6	0.84	51	317	-33	1.8*					541
	CAS 507-20-0		Trimethylchloromethane	3.20 r		124 °F		-27 °F	(69)					IIA
	(CH <sub>3</sub> ) <sub>3</sub> CCl	C <sub>4</sub> H <sub>9</sub> Cl		114 v		1 ppm = 3.86 mg/m <sup>3</sup>						1 mg/m <sup>3</sup> = 0.26 ppm		T1
76	tert-Butylcyclohexane		2-Cyclohexyl-2-methyl propane	140.2	0.81	171								
	CAS 3178-22-1		(1,1-Dimethylethyl) cyclohexane	4.84 r		340 °F								
	C <sub>10</sub> H <sub>18</sub> (CH <sub>3</sub> ) <sub>2</sub>	C <sub>10</sub> H <sub>20</sub>				1 ppm = 5.84 mg/m <sup>3</sup>						1 mg/m <sup>3</sup> = 0.17 ppm		
77	i-Butyl formate		Isobutyl formate	102.1	0.88	98	43	5	1.7			1.7		320
	CAS 542-55-2		Formic acid i-butylester	3.52 r		208 °F		41 °F	(72)			(72)		
	HCOOC <sub>4</sub> H <sub>9</sub>	C <sub>5</sub> H <sub>10</sub> O <sub>2</sub>	2-Methylpropyl formate	123 v		1 ppm = 4.25 mg/m <sup>3</sup>						1 mg/m <sup>3</sup> = 0.24 ppm		T2
78	n-Butyl formate		Formic acid butyl ester	102.1	0.92	106	31	18	1.6			1.7		265
	CAS 592-84-7		Butyl methanoate	3.52 r		223 °F		64 °F	(68)	(53)		(72)		
	HCOOC <sub>4</sub> H <sub>9</sub>	C <sub>5</sub> H <sub>10</sub> O <sub>2</sub>		111 v		1 ppm = 4.25 mg/m <sup>3</sup>						1 mg/m <sup>3</sup> = 0.24 ppm		T3
79	n-Butyl mercaptan		1-Butanethiol	90.2	0.84	98	40	1	1.4	1.4				272
	CAS 109-79-5	NBM	Butane-1-thiol	3.11 r		208 °F		34 °F	(53)	(53)				
	C <sub>4</sub> H <sub>9</sub> SH	C <sub>4</sub> H <sub>10</sub> S	1-Mercaptobutane	94 v		1 ppm = 3.76 mg/m <sup>3</sup>						1 mg/m <sup>3</sup> = 0.27 ppm		T3
			Thiobutyl alcohol											
80	tert-Butyl mercaptan		2-Methylpropane-2-thiol	90.2	0.83	64	195	-26	1.3*					
	CAS 75-66-1	tBM	1,1-Dimethyl ethanethiol	3.11 r		147 °F		-15 °F	(49)					
	(CH <sub>3</sub> ) <sub>2</sub> CSH	C <sub>4</sub> H <sub>10</sub> S	2-Methyl-2-propanethiol			1 ppm = 3.75 mg/m <sup>3</sup>						1 mg/m <sup>3</sup> = 0.27 ppm		
81	Butyl methacrylate		n-Butyl methacrylate	142.2	0.90	163	2.7	50	1.0	1.0			1.0	290
	CAS 97-88-1	BMA	2-Methyl butylacrylate	4.91 r		325 °F		122 °F	(59)	(59)			(59)	IIA
	CH <sub>2</sub> =C(CH <sub>3</sub> )COOC <sub>4</sub> H <sub>9</sub>	C <sub>8</sub> H <sub>14</sub> O <sub>2</sub>	2-Methyl-2-propenoic acid butylester			1 ppm = 5.93 mg/m <sup>3</sup>						1 mg/m <sup>3</sup> = 0.17 ppm		T3
			Methacrylic acid butylester											

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
69	2 (6.1)		CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
70			EC	Polytron 7000 and P 8100 Hydrides	BTBS: 5 / 20 / 20 ppm / LDL = 0.4 ppm	S = 0.08
71			EC	Polytron 7000 and P 8100 Hydrides SC	as PH <sub>3</sub> x 0.75 (0.3 / 1.0 ppm x 0.75)	S = 1.5 (L)
72			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
73			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison
			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (?)	
			IR	Polytron 5700 type 334	100 %LEL (?)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
74	3 (12)		CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	corrosive/sensor poison
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
75			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison
			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (?)	
			IR	Polytron 5700 type 334	100 %LEL (?)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
76			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
77			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (?)	
			IR	Polytron 5700 type 334	100 %LEL (?)	
78			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (?)	
			IR	Polytron 5700 type 334	100 %LEL (?)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
79	0.5 (1.9)	10 (38)	IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (\$)	
			IR	Polytron 5700 type 334	100 %LEL (\$)	
80			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (\$)	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			EC	Polytron 7000 and P 8100 H <sub>2</sub> S LC	tBM: 20 / 50 / 100 ppm / LDL = 1 ppm	
81			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
82	But-2-yne		2-Butyne	54.1	0.69	27	774	< -20	1.4			1.4		
	CAS 503-17-3		Dimethyl acetylene	1.87 r		81 °F		< -4 °F	(32)			(32)		
	CH <sub>3</sub> CCCH <sub>3</sub>	C <sub>4</sub> H <sub>6</sub>	Crotonylene	68 v		1 ppm = 2.25 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.44 ppm				
83	i-Butyraldehyde		i-Butanal	72.1	0.79	64	184	-24	1.6	1.6		1.6	1.6	165
	CAS 78-84-2		Isobutanal	2.49 r		147 °F		-11 °F	(48)	(48)		(48)	(48)	IIA
	(CH <sub>3</sub> ) <sub>2</sub> CHCHO	C <sub>4</sub> H <sub>8</sub> O	i-Butyric aldehyde	91 v		1 ppm = 3.00 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.33 ppm				T4
			Isobutyraldehyde 2-Methyl propanal Isobutyric aldehyde											
84	n-Butyraldehyde		n-Butanal	72.1	0.80	75	113	-11	1.7	1.7		1.9	1.8	190
	CAS 123-72-8		Butyl aldehyd	2.49 r		167 °F		12 °F	(77)	(77)		(57)	(54)	IIA
	C <sub>3</sub> H <sub>7</sub> CHO	C <sub>4</sub> H <sub>8</sub> O	Butyric acid aldehyde n-Butyric aldehyde	96 v		1 ppm = 3.00 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.33 ppm				T4
85	Butyronitrile		n-Butyronitrile	92.6	0.88	69	158	18	1.6		1.65	1.65		500
	CAS 109-74-0		Butanenitrile	2.39 r		243 °F		-64 °F	(46)		(48)	(48)		
	C <sub>3</sub> H <sub>7</sub> CN	C <sub>4</sub> H <sub>7</sub> N	Butyric acid anitrile	87 v		1 ppm = 2.88 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.35 ppm				T1
			1-Cyanopropane Propyl cyanide n-Propyl cyanide											
86	Carbon dioxide		Carbonic anhydride	44.0	Gas	-78.5	Gas	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 124-38-9		Carbonic acid anhydride	1.52 r		-109 °F								
	CO <sub>2</sub>	CO <sub>2</sub>	R744			1 ppm = 1.83 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.55 ppm				
87	87 Carbon monoxide		Carbon oxide	28.0	Gas	-192	Gas	Gas	10.9	10.9	12.5	12.5	10.9	605
	CAS 630-08-0		Carbonic oxide	0.97 r		-314 °F			(127)	(127)	(146)	(146)	(127)	IIA
	CO	CO				1 ppm = 1.17 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.86 ppm				T1
88	Chlorine			70.9	0.92	-34	Gas	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 7782-50-5			2.45 r		-29 °F								
	Cl <sub>2</sub>	Cl <sub>2</sub>				1 ppm = 2.95 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.34 ppm				
89	Chlorine dioxide		Chlorine peroxide	67.5	Gas	11	Gas	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 10049-04-4			2.33 r		52 °F								
	ClO <sub>2</sub>	ClO <sub>2</sub>				1 ppm = 2.81 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.36 ppm				
90	Chlorine trifluoride		Chlorotrifluoride	92.4	Gas	12	Gas	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 7790-91-2			3.19 r		54 °F								
	ClF <sub>3</sub>	ClF <sub>3</sub>				1 ppm = 3.85 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.26 ppm				
91	2-Chloroacetaldehyde		2-Chloro-1-ethanal	78.5	1.21	86	133			5.7				
	CAS 107-20-0		Monochloroacetaldehyde	2.71 r		187 °F				(186)				
	CH <sub>2</sub> ClCHO	C <sub>2</sub> H <sub>3</sub> ClO				1 ppm = 3.27 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.31 ppm				
92	Chlorobenzene		Phenyl chloride	112.6	1.11	132	12	28	1.3	1.3	1.3	1.3	1.4	590
	CAS 108-90-7	MCB	Monochlorobenzene	3.89 r		270 °F		82 °F	(61)	(61)	(61)	(61)	(66)	IIA
	C <sub>6</sub> H <sub>5</sub> Cl	C <sub>6</sub> H <sub>5</sub> Cl	Benzene chloride Chlorobenzol	82 v		1 ppm = 4.69 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.21 ppm				T1
93	3-Chloro-2-butanone		1-Chloroethyl methyl ketone	106.6	1.06	115	23		2.3*					
	CAS 4091-39-8			3.68 r		239 °F				(102)				
	CH <sub>3</sub> CHClCOCH <sub>3</sub>	C <sub>4</sub> H <sub>7</sub> ClO				1 ppm = 4.44 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.23 ppm				
94	1-Chlorobut-2-ene		Crotyl chloride	90.6	0.93	85	494	< 0				4.2		
	CAS 591-97-9			3.13 r		185 °F						(159)		
	CH <sub>3</sub> CH=CHCH <sub>2</sub> Cl	C <sub>4</sub> H <sub>7</sub> Cl				1 ppm = 3.78 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.26 ppm				

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
82			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL (?)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
83			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			EC	Polytron 7000 and P 8100 OVI	as Aald x 2 (50 / 100 / 200 ppm x 2)	S = 0.15 (L)
84	20 (60)		CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL // 5100 ppm Gas-Library	
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL // 2550 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
			EC	Polytron 7000 and P 8100 OVI	as Aald x 2 (50 / 100 / 200 ppm x 2)	S = 0.15 (L)
85		8 (23)	IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
86	5000 (9167)	5000 (9167)	IR	PIR 7200 and Polytron 8720	2000 ppm / 10 vol% / 30 vol%	performance approved
			IR	Polytron 5720	2000 + 5000 ppm + 1 + 2 + 5 + 10 + 20 + 30 vol%	performance approved
87	30 (35)	50 (58)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			EC	Polytron 7000 and P 8100 CO	CO: 50 / 300 / 1000 ppm / LDL = 5 ppm	
			EC	Polytron 7000 and P 8100 CO LH	CO: 50 / 300 / 300 ppm / LDL = 15 ppm	
			EC	Polytron 7000 and P 8100 CO LS	CO: 200 / 1000 / 5000 ppm / LDL = 10 ppm	
			EC	Polytron 5100 CO	50 + 100 + 200 + 300 + 500 + 1000 ppm	
			EC	Polytron 5100 CO LS	200 + 300 + 500 + 1000 + 2000 + 3000 ppm	+ 4000 + 5000 ppm
			EC	Polytron 5100 CO LH	50 + 100 + 200 + 300 ppm	
			EC	Polytron 3000 CO	100 or 300 or 1000 ppm	
			EC	Polytron 3000 CO LS	300 ppm	
88	0.5 (1.5)	1c (3.0)	EC	Polytron 7000 and P 8100 Cl2	Cl2: 1 / 10 / 100 ppm / LDL = 0.05 ppm	S = 1.0
			EC	Polytron 5100 Cl2	1 + 3 + 5 + 10 + 20 + 30 + 50 ppm	
			EC	Polytron 3000 Cl2	1 or 10 or 25 ppm	
			EC	Polytron 2000 Cl2	10 ppm	
89	0.1 (0.28)	0.1 (0.28)	EC	Polytron 7000 and P 8100 Cl2	ClO2: 1 / 10 / 100 ppm / LDL = 0.05 ppm	S = 0.45 (+/- 20%)
90		0.1c (0.39)	EC	Polytron 7000 and P 8100 AC	ClF3: 3 / 3 / 30 ppm / LDL = 0.5 ppm	allowed for cross calibration with Cl2
			EC	Polytron 3000 AC	3 or 10 ppm	allowed for cross calibration with Cl2
91		1c (3.3)	EC	Polytron 7000 and P 8100 OVI	as C3H6 x 0.5 (30 / 50 / 100 ppm x 0.5)	S = 1.4 (L)
92	10 (47)	75 (352)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	corrosive/sensor poison
			IR	PIR 7000 type 334, P 8700 type 334	50 / 100 %LEL // 6500 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	performance approved
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			EC	Polytron 7000 and P 8100 OVI	as EO (20 / 50 / 200 ppm)	S = 1.0 (L)
93			IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	40 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
94			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison
			EC	Polytron 7000 and P 8100 OVI	as Aald x 2 (50 / 100 / 200 ppm x 2)	S = 0.15 (L)

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
95	1-Chloro-1,1-difluoroethane		Difluoro chloroethane	100.5	Gas	-10	Gas	Gas	6.3			6.2		
	CAS 75-68-3		R142b	3.47 r		14 °F			(264)			(260)		IIA
	CH <sub>3</sub> CClF <sub>2</sub>	C <sub>2</sub> H <sub>3</sub> ClF <sub>2</sub>	HCFC 142b			1 ppm = 4.19 mg/m <sup>3</sup>						1 mg/m <sup>3</sup> = 0.24 ppm		
96	Chlorodimethylsilane		Dimethylchlorosilane	94.6	0.85	35	582	< -28	3.0*					
	CAS 1066-35-9	DMSC	Dimethylsilyl chloride	3.27 r		95 °F		< -18 °F	(118)					IIC
	(CH <sub>3</sub> ) <sub>2</sub> Si(H)Cl	C <sub>2</sub> H <sub>7</sub> ClSi				1 ppm = 3.94 mg/m <sup>3</sup>						1 mg/m <sup>3</sup> = 0.25 ppm		
97	Chloroethanol		2-Chloroethan-1-ol	80.5	1.21	129	7.1	55	5.0	4.9	4.9	4.9	5.0	425
	CAS 107-07-3		2-Chloroethyl alcohol	2.78 r		264 °F		131 °F	(168)	(164)	(164)	(164)	(168)	IIA
	Cl-CH <sub>2</sub> CH <sub>2</sub> -OH	C <sub>2</sub> H <sub>5</sub> ClO	Ethylene chlorohydrin Glycol chlorohydrin			1 ppm = 3.35 mg/m <sup>3</sup>						1 mg/m <sup>3</sup> = 0.30 ppm		T2
98	Chloromethyl methylether		Chlorodimethyl ether	80.5	1.06	59	213	-8					4.4	
	CAS 107-30-2	CMME	Chloromethoxymethane	2.78 r		138 °F		18 °F					(148)	IIA
	ClCH <sub>2</sub> OCH <sub>3</sub>	C <sub>2</sub> H <sub>5</sub> ClO	Methylchloromethyl ether Methoxy methylchloride Dimethylchloroether			1 ppm = 3.35 mg/m <sup>3</sup>						1 mg/m <sup>3</sup> = 0.30 ppm		
99	2-Chloropropene		2-Chloropropylene	76.5	0.93	23	915	< -20	2.5			4.5		
	CAS 557-98-2		i-Propenyl chloride	2.64 r		73 °F		< -4 °F	(80)			(143)		
	CH <sub>2</sub> =C(Cl)CH <sub>3</sub>	C <sub>3</sub> H <sub>5</sub> Cl	Isopropenyl chloride	128 v		1 ppm = 3.19 mg/m <sup>3</sup>						1 mg/m <sup>3</sup> = 0.31 ppm		
100	Chlorosulfonic acid		Chlorosulfuric acid	116.5	1.75	151	0.45	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 7790-94-5		Sulfuric chlorohydrin	4.02 r		304 °F								
	HSO <sub>3</sub> Cl	HClO <sub>3</sub> S	Sulfuryl oxychloride			1 ppm = 4.85 mg/m <sup>3</sup>						1 mg/m <sup>3</sup> = 0.21 ppm		
101	2-Chlorotoluene		1-Chloro-2-methylbenzene	126.6	1.08	159	3.8	43	1.3					550
	CAS 95-49-8		o-Chlorotoluene	4.37 r		318 °F		109 °F	(69)					IIA
	CH <sub>3</sub> C <sub>6</sub> H <sub>4</sub> Cl	C <sub>7</sub> H <sub>7</sub> Cl	o-Tolyl chloride			1 ppm = 5.28 mg/m <sup>3</sup>						1 mg/m <sup>3</sup> = 0.19 ppm		T1
102	Cumene		Cumol	120.2	0.86	152	5.3	31	0.8	0.8	0.9	0.9	0.8	420
	CAS 98-82-8		i-Propyl benzene	4.15 r		306 °F		88 °F	(40)	(40)	(45)	(45)	(40)	IIA
	C <sub>6</sub> H <sub>5</sub> CH(CH <sub>3</sub> ) <sub>2</sub>	C <sub>9</sub> H <sub>12</sub>	Isopropyl benzene 2-Phenyl propane	70 v		1 ppm = 5.01 mg/m <sup>3</sup>						1 mg/m <sup>3</sup> = 0.20 ppm		T2
103	Cyclobutane		Tetramethylene	56.1	Gas	12.5	Gas	Gas	1.8	1.8		1.8	1.8	
	CAS 287-23-0			1.94 r		55 °F			(42)	(42)		(42)	(42)	IIA
	(CH <sub>2</sub> ) <sub>4</sub>	C <sub>4</sub> H <sub>8</sub>				1 ppm = 2.34 mg/m <sup>3</sup>						1 mg/m <sup>3</sup> = 0.43 ppm		
104	Cyclohexane		Hexahydrobenzene	84.2	0.78	81	104	-18	1.0	1.0	1.3	1.3	1.2	260
	CAS 110-82-7		Hexamethylene	2.91 r		178 °F		0 °F	(35)	(35)	(46)	(46)	(42)	IIA
	(CH <sub>2</sub> ) <sub>6</sub>	C <sub>6</sub> H <sub>12</sub>	Hexanaphthene Naphthene	67 v		1 ppm = 3.51 mg/m <sup>3</sup>						1 mg/m <sup>3</sup> = 0.29 ppm		T3
105	Cyclohexanol		Cyclohexyl alcohol	100.2	0.95	161	1	61	1.2	1.2			1.2	300
	CAS 108-93-0	Anol	Hexahydrophenol	3.46 r		322 °F		142 °F	(50)	(50)			(50)	IIA
	(CH <sub>2</sub> ) <sub>5</sub> CHOH	C <sub>6</sub> H <sub>12</sub> O	Hydroxycyclohexane Hexalin Hydralin			1 ppm = 4.18 mg/m <sup>3</sup>						1 mg/m <sup>3</sup> = 0.24 ppm		T3
106	Cyclohexanone		Sextone	98.1	0.95	156	4.5	43	1.3	1.3	1.1	1.1	1.0	430
	CAS 108-94-1	Anon	Hexanone	3.39 r		313 °F		109 °F	(53)	(53)	(45)	(45)	(41)	IIA
	(CH <sub>2</sub> ) <sub>5</sub> CO	C <sub>6</sub> H <sub>10</sub> O	Cyclohexyl ketone Ketoexamethylene Pimelic ketone			1 ppm = 4.09 mg/m <sup>3</sup>						1 mg/m <sup>3</sup> = 0.24 ppm		T2

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
95	1000 (4188)		IR	PIR 7000 type 334, P 8700 type 334	50 / 100 %LEL // 31000 ppm Gas-Library	
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	100 / 100 %LEL (&)	
			IR	Polytron 5700 type 340	100 %LEL (&)	
96			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
97	1 (3.4)	5 (17)	EC	Polytron 7000 and P 8100 OV1	as EO x 0.5 (20 / 50 / 100 ppm x 0.5)	S = 2.0 (L)
98			IR	PIR 7000 type 334, P 8700 type 334	15 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	5 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
99			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison
			IR	PIR 7000 type 334, P 8700 type 334	45 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	45 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
100			EC	Polytron 7000 and P 8100 AC	Acid: 3 / 10 / 30 ppm / LDL = 0.5 ppm	
101		50 (264)	IR	PIR 7000 type 334, P 8700 type 334	40 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	55 / 100 %LEL	
			IR	Polytron 5700 type 340	100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
102	10 (50)	50 (250)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL // 2000 ppm Gas-Library	
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL // 1600 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
103			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
104	200 (702)	300 (1053)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL // 600 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			OP	Polytron Pulsar 2	1 // 4 / 8 LELm	CSF = 0.62 (Propane = 1.00) / LEL = 1.0
105	50 (209)		IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
106	20 (82)	50 (204)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL // 3500 ppm Gas-Library	
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL // 1500 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
EC	Polytron 7000 and P 8100 OV1	as EO (20 / 50 / 200 ppm)	S = 1.0 (L)			

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
107	Cyclohexene		1.2.3.4-Tetrahydrobenzene	82.1	0.81	83	90	-17	1.1	1.1		1.2	1.2	265
	CAS 110-83-8		Hexanaphthylene	2.83 r		181 °F		1 °F	(38)	(38)		(41)	(41)	IIA
	C <sub>6</sub> H <sub>10</sub>	C <sub>6</sub> H <sub>10</sub>	Benzene tetrahydride	70 v		1 ppm = 3.42 mg/m <sup>3</sup>								T3
108	Cyclohexene oxide		1.2-Epoxy cyclohexane	98.1	0.97	130	12	24	1.5					
	CAS 286-20-4	CHO	Tetramethylene oxirane	3.39 r		266 °F		75 °F	(61)					
	(CH <sub>2</sub> ) <sub>4</sub> CHCHO	C <sub>6</sub> H <sub>10</sub> O	7-Oxabicyclo(4.1.0)heptane	95 v		1 ppm = 4.09 mg/m <sup>3</sup>								1 mg/m <sup>3</sup> = 0.24 ppm
109	Cyclohexylamine		Cylohexane amine	99.2	0.86	134	13	27	1.1	1.1	1.5	1.5	1.1	275
	CAS 108-91-8	CHA	Aminocyclohexane	3.42 r		273 °F		81 °F	(45)	(45)	(62)	(62)	(45)	IIA
	(CH <sub>2</sub> ) <sub>5</sub> CHNH <sub>2</sub>	C <sub>6</sub> H <sub>13</sub> N	Hexahydroaniline	79 v		1 ppm = 4.13 mg/m <sup>3</sup>								1 mg/m <sup>3</sup> = 0.24 ppm
			Aminohexahydrobenzene											
110	Cyclopentane		Pentamethylene	70.1	0.74	49	346	<-20	1.4	1.4	1.1	1.5	1.4	320
	CAS 287-92-3	CP		2.42 r		120 °F		<-4 °F	(41)	(41)	(32)	(44)	(41)	IIA
	(CH <sub>2</sub> ) <sub>5</sub>	C <sub>5</sub> H <sub>10</sub>		83 v		1 ppm = 2.92 mg/m <sup>3</sup>								1 mg/m <sup>3</sup> = 0.34 ppm
111	Cyclopentanone		Keto pentamethylene	84.1	0.95	131	11.5	26	1.6*					430
	CAS 120-92-3		Ketocyclopentane	2.90 r		268 °F		79 °F	(56)					IIA
	(CH <sub>2</sub> ) <sub>4</sub> CO	C <sub>5</sub> H <sub>8</sub> O	Adipic ketone	88 v		1 ppm = 3.50 mg/m <sup>3</sup>								1 mg/m <sup>3</sup> = 0.29 ppm
112	Cyclopentylamine		Aminocyclopentane	85.2	0.86	107	24.9		1.3*					
	CAS 1003-03-8		Cyclopentane-1-amine	2.94 r		225 °F			(46)					
	C <sub>5</sub> H <sub>11</sub> NH <sub>2</sub>	C <sub>5</sub> H <sub>11</sub> N		80 v		1 ppm = 3.55 mg/m <sup>3</sup>								1 mg/m <sup>3</sup> = 0.28 ppm
113	113 Cyclopropane		Trimethylene	42.1	Gas	-33	Gas	Gas	2.4	2.4		2.4	2.4	495
	CAS 75-19-4		RC 270	1.45 r		385 °F		142 °F	(40)	(40)		(42)	(42)	IIA
	(CH <sub>2</sub> ) <sub>3</sub>	C <sub>3</sub> H <sub>6</sub>				1 ppm = 1.75 mg/m <sup>3</sup>								1 mg/m <sup>3</sup> = 0.57 ppm
114	cis-Decahydronaphthalene		cis-Bicyclo(4.4.0)decane	138.3	0.90	196	1.1	61	0.7	0.7			0.7	240
	CAS 493-01-6		cis-Decaline	4.77 r		385 °F		142 °F	(40)	(40)			(40)	IIA
	CH(CH <sub>2</sub> ) <sub>6</sub> CH	C <sub>10</sub> H <sub>18</sub>	Perhydronaphthalene			1 ppm = 5.76 mg/m <sup>3</sup>								1 mg/m <sup>3</sup> = 0.17 ppm
			cis-Naphthane											
115	Decamethyl cyclopentasiloxane		Cyclomethicone	370.8	0.96	210	0.16	77	0.7*					390
	CAS 541-02-6	DMCPS		12.80 r		410 °F		171 °F	(108)					T2
	Si <sub>5</sub> O <sub>5</sub> (CH <sub>3</sub> ) <sub>10</sub>	C <sub>10</sub> H <sub>30</sub> O <sub>5</sub> Si <sub>5</sub>				1 ppm = 15.45 mg/m <sup>3</sup>								1 mg/m <sup>3</sup> = 0.06 ppm
116	n-Decane			142.3	0.73	174	1.7	46	0.7	0.7		0.8	0.7	200
	CAS 124-18-5			4.91 r		345 °F		115 °F	(42)	(42)		(47)	(42)	IIA
	C <sub>10</sub> H <sub>22</sub>	C <sub>10</sub> H <sub>22</sub>				1 ppm = 5.93 mg/m <sup>3</sup>								1 mg/m <sup>3</sup> = 0.17 ppm
117	1-Decene		n-Decylene	140.3	0.74	172	2	<55		0.55		0.5		235
	CAS 872-05-9			4.84 r		342 °F		<131 °F		(32)		(29)		
	H <sub>2</sub> C=CH(CH <sub>2</sub> ) <sub>7</sub> CH <sub>3</sub>	C <sub>10</sub> H <sub>20</sub>				1 ppm = 5.85 mg/m <sup>3</sup>								1 mg/m <sup>3</sup> = 0.17 ppm
118	Deuterium		Heavy Hydrogen	4.0	Gas	-250	Gas	Gas	6.7			5.0		560
	CAS 7782-39-0	2D	Diplogen	0.14 r		-418 °F			(11)			(8.3)		
	D <sub>2</sub>	D <sub>2</sub>	Dideuterium			1 ppm = 0.17 mg/m <sup>3</sup>								1 mg/m <sup>3</sup> = 6.00 ppm
119	Diacetone alcohol		4-Hydroxy-4-methyl-2-pentanone	116.2	0.93	166	1	58	1.3	1.8	1.8	1.8	1.8	515
	CAS 123-42-2		2-Methyl-2-pentanol-4-one	4.01 r		331 °F		136 °F	(63)	(87)	(87)	(87)	(87)	IIB
	CH <sub>3</sub> COCH <sub>2</sub> COH(CH <sub>3</sub> ) <sub>2</sub>	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	4-Hydroxy-2-keto-4-methylpentane			1 ppm = 4.84 mg/m <sup>3</sup>								1 mg/m <sup>3</sup> = 0.21 ppm

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
107		300 (1026)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (?)	
			IR	Polytron 5700 type 334	100 %LEL (?)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
108			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
109	2 (8.3)	10 (41)	CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
110		600 (1753)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL // 2100 ppm Gas-Library	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL // 700 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			OP	Polytron Pulsar 2	1 // 4 / 8 LELm	
111			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
112			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
113			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
114			IR	PIR 7000 type 334, P 8700 type 334	60 / 100 %LEL (&)	
			IR	Polytron 5700 type 334	100 %LEL (&)	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
115			IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	30 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
116			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL // 1750 ppm Gas-Library	
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	5 / 100 %LEL // 350 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
117			IR	PIR 7000 type 334, P 8700 type 334	45 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 100 %LEL	
118			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
119	20 (97)	50 (242)	IR	PIR 7000 type 334, P 8700 type 334	40 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	25 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
120	120 Di-i-amyl ether CAS 544-01-4 $((CH_3)_2CH(CH_2)_2)_2O$	$C_{10}H_{22}O$	Diisoamyl ether Isoamyl ether Di-i-pentyl ether Diisopentyl ether Isopentyl ether 1,1'-Oxybis(3-methyl-butane) Di-3-methylbutyl ether	158.3 5.46 r	0.78	173 343 °F	1.49	45 113 °F	0.6 (40)					
										1 mg/m <sup>3</sup> = 6.60 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.15 ppm
121	Diborane CAS 19287-45-7 $B_2H_6$	$H_6B_2$	Dimethylchlorosilane Dimethylsilyl chloride	27.7 0.96 r	Gas	-93 -135 °F	Gas	Gas	0.8 (9.2)			0.8 (9.2)		
										1 ppm = 1.15 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.87 ppm
122	Dibutylamine CAS 111-92-2 $(C_4H_9)_2NH$	$C_8H_{19}N$	Boron hydride Boroethane Diboron hexahydride	129.3 4.46 r	0.76	161 322 °F	2.7	42 108 °F				1.1 (59)		260 IIA T3
										1 ppm = 5.39 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.19 ppm
123	Di-n-butylether CAS 142-96-1 $(C_4H_9)_2O$	$C_8H_{18}O$	1-Butoxybutane 1,1'-Oxybisbutane Dibutylether Butyl ether	130.2 4.49 r 95 v	0.77	141 286 °F	6.4	25 77 °F	0.9 (49)	0.9 (49)		1.5 (81)	0.9 (49)	175 IIB T4
														1 mg/m <sup>3</sup> = 0.30 ppm
124	Di-n-butylether CAS 142-96-1 $(CH_3)_3COOC(CH_3)_3$	DTBP $C_8H_{18}O_2$	Bis(1,1-dimethylethyl) peroxide	146.2 5.05 r 81 v	0.79	110 230 °F	26	4 39 °F	0.7 (43)	0.74 (45)			1.0 (61)	170 IIB T4
														1 ppm = 6.09 mg/m <sup>3</sup>
														1 mg/m <sup>3</sup> = 0.16 ppm
125	1,2-Dichlorobenzene CAS 95-50-1 $C_6H_4Cl_2$	ODCB $C_6H_4Cl_2$	ortho-Dichlorobenzene o-Dichlorobenzol	147.0 5.07 r	1.32	179 354 °F	1.33	66 151 °F	1.7 (104)		2.2 (135)	2.2 (135)	2.2 (135)	640 IIA T1
														1 ppm = 6.13 mg/m <sup>3</sup>
														1 mg/m <sup>3</sup> = 0.16 ppm
126	1,1-Dichloroethane CAS 75-34-3 $CH_3CHCl_2$	$C_2H_4Cl_2$	Ethylidene chloride R150a	99.0 3.42 r 296 v	1.17	57 135 °F	243	-10 14 °F	5.6 (231)	5.6 (231)	5.4 (223)	5.4 (223)	5.6 (231)	440 IIA T2
														1 ppm = 4.13 mg/m <sup>3</sup>
														1 mg/m <sup>3</sup> = 0.24 ppm
127	1,2-Dichloroethane CAS 107-06-2 $ClCH_2CH_2Cl$	EDC $C_2H_4Cl_2$	Ethylene chloride Ethylene dichloride Ethane dichloride R150	99.0 3.42 r 208 v	1.25	84 183 °F	87	13 55 °F	4.2 (173)	6.2 (256)	6.2 (256)	6.2 (256)	6.2 (256)	440 IIA T2
														1 ppm = 4.13 mg/m <sup>3</sup>
														1 mg/m <sup>3</sup> = 0.24 ppm
128	1,1-Dichloroethylene CAS 75-35-4 $CH_2=CCl_2$	VDC $C_2H_2Cl_2$	1,1-Dichloroethene Vinylidene chloride 1130a	96.9 3.34 r 314 v	1.25	32 90 °F	660	-25 -13 °F	6.5 (262)	6.5 (262)	6.5 (262)	6.5 (262)	5.6 (226)	530 IIA T1
														1 ppm = 4.04 mg/m <sup>3</sup>
														1 mg/m <sup>3</sup> = 0.25 ppm
129	1,2-Dichloroethylene trans CAS 156-60-5 $CHCl=CHCl$	$C_2H_2Cl_2F$	1,2-Dichloroethene trans Dioform trans R1130	96.9 3.34 r 293 v	1.26	48 118 °F	361	-6 21 °F	6.1 (246)				5.6 (226)	440 IIA T2
														1 ppm = 4.88 mg/m <sup>3</sup>
														1 mg/m <sup>3</sup> = 0.21 ppm
130	1,1-Dichloro-1- fluoroethane CAS 1717-00-6 $CCl_2FCH_3$	Anol $C_2H_5Cl$	R141b HCFC 141b	117.0 4.04 r	1.27	32 90 °F	648		5.6* (273)					
														1 ppm = 4.88 mg/m <sup>3</sup>
														1 mg/m <sup>3</sup> = 0.28 ppm
131	Dichloromethane CAS 75-09-2 $CH_2Cl_2$	DCM $CH_2Cl_2$	Methylene chloride Methylene dichloride R30	84.9 2.93 r 518 v	1.33	40 104 °F	470	n. a.	13.0 (460)		13.0 (460)	13.0 (460)		605 IIA T1
														1 ppm = 3.54 mg/m <sup>3</sup>
														1 mg/m <sup>3</sup> = 0.28 ppm
132	1,2-Dichloropropane CAS 78-87-5 $CH_3CH(Cl)CH_2Cl$	PDC $C_3H_6Cl_2$	1,2-Propylene dichloride R270	113.0 3.90 r 188 v	1.16	96 205 °F	51	15 59 °F	3.1 (146)	3.4 (160)	3.4 (160)	3.4 (160)	3.4 (160)	555 IIA T1
														1 ppm = 4.71 mg/m <sup>3</sup>
														1 mg/m <sup>3</sup> = 0.21 ppm

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
120			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
121	0.1 (0.12)		EC	Polytron 7000 and P 8100 Hydrides	B2H6: 0.5 / 1 / 1 ppm / LDL = 0.05 ppm	S = 0.4
			EC	Polytron 7000 and P 8100 Hydrides SC	B2H6: 0.3 / 1 / 5 ppm / LDL = 0.02 ppm	S = 0.45
			EC	Polytron 3000 B2H6	0.5 ppm	
122	5 (27)		IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
123			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (\$)	
			IR	Polytron 5700 type 334	100 %LEL (\$)	
124			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
125	10 (61)	50c (306)	IR	PIR 7000 type 334, P 8700 type 334	100 / 100 %LEL (&)	
			IR	Polytron 5700 type 334	100 %LEL (&)	
126	100 (413)	100 (413)	CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison
			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (\$)	
			IR	Polytron 5700 type 334	100 %LEL (\$)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
127	1T (4.1)	50 (206)	CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison
			IR	PIR 7000 type 334, P 8700 type 334	40 / 100 %LEL // 15500 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	40 / 100 %LEL // 15500 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	50 + 100 %LEL Gas-Library	performance approved
128	2 (8.1)		CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL (?)	corrosive/sensor poison
129	200 (808)		CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL (?)	corrosive/sensor poison
			IR	PIR 7000 type 334, P 8700 type 334	50 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
130			IR	PIR 7000 type 334, P 8700 type 334	40 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	85 / 100 %LEL (&)	
			IR	Polytron 5700 type 340	100 %LEL (&)	
131	50 (177)	25 (88)	IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL // 39000 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	50 / 100 %LEL // 65000 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
132	75 (353)		CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL (?)	corrosive/sensor poison
			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL // 9300 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	30 / 100 %LEL // 9300 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
133	1,3-Dichloro-2-propanol CAS 96-23-1 (CH <sub>2</sub> Cl) <sub>2</sub> CHOH	1,3-DCP C <sub>3</sub> H <sub>6</sub> Cl <sub>2</sub> O	1,3-Dichlorohydrin 1,3-Dichloro-i-propanol 1,3-Dichloroisopropyl alcohol 1,3-Dichloro-2-hydroxypropane	129.0 4.45 r	1.36	175 347 °F	0.72	74 165 °F	3.5* (188)					IIA
										1 ppm = 5.38 mg/m <sup>3</sup>	1 mg/m <sup>3</sup> = 0.19 ppm			
134	1,3-Dichloropropene CAS 542-75-6 ClCH <sub>2</sub> CH=CHCl	DCP C <sub>3</sub> H <sub>4</sub> Cl <sub>2</sub>	Telone 3-Chloroallyl chloride 1,3-Dichloropropylene	111.0 3.83 r	1.23	108 226 °F	37	27 81 °F	5.3 (245)		5.3 (245)	5.3 (245)		IIA
										1 ppm = 4.63 mg/m <sup>3</sup>	1 mg/m <sup>3</sup> = 0.22 ppm			
135	Dichlorosilane CAS 4109-96-0 SiH <sub>2</sub> Cl <sub>2</sub>	DCS H <sub>2</sub> Cl <sub>2</sub> Si	Silicon dichloride	101.0 3.49 r	Gas	8 46 °F	Gas	Gas	2.5 (105)			4.1 (173)		185
										1 ppm = 4.21 mg/m <sup>3</sup>	1 mg/m <sup>3</sup> = 0.24 ppm			T4
136	Dicyclohexyl CAS 92-51-3 (C <sub>6</sub> H <sub>11</sub> ) <sub>2</sub>		Bicyclohexyl Cyclohexyl cyclohexane	166.3 5.74 r	0.86	227 441 °F	74	0.6 165 °F				0.7 (49)		240 IIA
		C <sub>12</sub> H <sub>22</sub>								1 ppm = 5.51 mg/m <sup>3</sup>	1 mg/m <sup>3</sup> = 0.18 ppm			T3
137	1,3-Dicyclopentadiene CAS 77-73-6 C <sub>10</sub> H <sub>12</sub>		4,7-Methylenetetrahydroindene Cyclopentadiene dimer Tetrahydro-4,7-methanoindene	132.2 4.56 r	0.94	166 331 °F	3	39 102 °F		0.8 (44)	0.8 (44)	0.8 (44)	0.8 (44)	500 IIA
		C <sub>10</sub> H <sub>12</sub>								1 ppm = 5.51 mg/m <sup>3</sup>	1 mg/m <sup>3</sup> = 0.18 ppm			T1
138	1,1-Diethoxyethane CAS 105-57-7 CH <sub>3</sub> CH(OC <sub>2</sub> H <sub>5</sub> ) <sub>2</sub>		Acetal Diethylacetal Acetaldehyde diethyl acetal	118.2 4.08 r	0.82	102 216 °F	35	13 55 °F	1.6 (79)			1.6 (79)		230
		C <sub>6</sub> H <sub>14</sub> O <sub>2</sub>								1 ppm = 4.93 mg/m <sup>3</sup>	1 mg/m <sup>3</sup> = 0.20 ppm			T3
			Ethylidene diethyl ether											
139	Diethoxy methyl silane CAS 2031-62-1 (C <sub>2</sub> H <sub>5</sub> O) <sub>2</sub> SiHCH <sub>3</sub>	DEMS C <sub>5</sub> H <sub>14</sub> O <sub>2</sub> Si	Methyl diethoxy silane Methylhydrogen diethoxy silane	134.3 4.64 r	0.84	94 201 °F			1.0* (56)					
										1 ppm = 5.60 mg/m <sup>3</sup>	1 mg/m <sup>3</sup> = 0.18 ppm			
140	Diethylamine CAS 109-89-7 (C <sub>2</sub> H <sub>5</sub> ) <sub>2</sub> NH	DEA C <sub>4</sub> H <sub>11</sub> N	N-Ethylethane amine N,N-Diethylamine	73.1 2.52 r	0.70	56 133 °F	256	< -20 < -4 °F	1.7 (52)	1.7 (52)	1.8 (55)	1.8 (55)	1.7 (52)	310 IIA
										1 ppm = 3.05 mg/m <sup>3</sup>	1 mg/m <sup>3</sup> = 0.33 ppm			T2
141	1,2-Diethylbenzene CAS 135-01-3 C <sub>6</sub> H <sub>4</sub> (C <sub>2</sub> H <sub>5</sub> ) <sub>2</sub>		o-Diethylbenzene	134.2 4.63 r	0.88	183 361 °F	1.1	55 131 °F	0.8* (45)					380 IIA
		C <sub>10</sub> H <sub>14</sub>								1 ppm = 5.59 mg/m <sup>3</sup>	1 mg/m <sup>3</sup> = 0.18 ppm			T2
142	Diethyl carbonate CAS 105-58-8 CO(OC <sub>2</sub> H <sub>5</sub> ) <sub>2</sub>	DEC C <sub>5</sub> H <sub>10</sub> O <sub>3</sub>	Diethoxy formic acid anhydride Carbonic acid diethyl ester	118.1 4.08 r	0.97	126 259 °F	11	25 77 °F	1.4 (69)	1.4 (69)			1.4 (69)	445 IIB
										1 ppm = 4.92 mg/m <sup>3</sup>	1 mg/m <sup>3</sup> = 0.20 ppm			T2
143	Diethylene glycol diethylether CAS 112-36-7 (C <sub>2</sub> H <sub>5</sub> OC <sub>2</sub> H <sub>4</sub> ) <sub>2</sub> O	DEGDDE C <sub>8</sub> H <sub>18</sub> O <sub>3</sub>	Diethyldiglycol Bis(2-ethoxyethyl)-ether Diethylcarbitol Ethylidiglyme 1,1'-Oxybis(2-ethoxy-ethane) 3,6,9-Trioxa undecane	162.2 5.60 r	0.91	189 372 °F	0.8		0.9** (61)					
										1 ppm = 6.76 mg/m <sup>3</sup>	1 mg/m <sup>3</sup> = 0.15 ppm			
144	Diethyleneglycol dimethylether CAS 111-96-6 CH <sub>3</sub> OC <sub>2</sub> H <sub>4</sub> OC <sub>2</sub> H <sub>4</sub> OC <sub>2</sub> H <sub>3</sub>	DEGDME C <sub>6</sub> H <sub>14</sub> O <sub>3</sub>	Bis(2-methoxyethyl)-ether Dimethyl diglycol Diglyme Dimethyl carbitol 1,1'-Oxybis(2-methoxy-ethane)	134.2 4.63 r	0.94	160 320 °F	2.2	51 124 °F	1.3 (73)					190
										1 ppm = 5.59 mg/m <sup>3</sup>	1 mg/m <sup>3</sup> = 0.18 ppm			T4
145	N,N-Diethylethanolamine CAS 100-37-8 (C <sub>2</sub> H <sub>5</sub> ) <sub>2</sub> NC <sub>2</sub> H <sub>4</sub> OH		2-Diethylaminoethanol 2-Hydroxy triethylamine 2-Diethylaminoethyl alcohol	117.2 4.05 r	0.88	161 322 °F	1.9	51.5 125 °F	1.8 (88)		6.7 (327)	6.7 (327)		320 IIA
		C <sub>6</sub> H <sub>15</sub> NO								1 ppm = 4.88 mg/m <sup>3</sup>	1 mg/m <sup>3</sup> = 0.20 ppm			

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
133			IR	PIR 7000 type 334, P 8700 type 334	55 / 100 %LEL	
			IR	Polytron 5700 type 334	100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	40 / 100 %LEL (&)	
			IR	Polytron 5700 type 340	50 + 100 %LEL (&)	
134	1 (4.6)		IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL // 15900 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	40 / 100 %LEL // 21200 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
135			EC	Polytron 7000 and P 8100 AC	DCS: 3 / 10 / 30 ppm / LDL = 0.5 ppm	Check sensor after prolonged exposure
			EC	Polytron 7000 and P 8100 HCl	DCS: 5 / 10 / 20 ppm / LDL = 0.2 ppm	S = 3.0
136			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
137	0.5 (2.8)	5 (28)	IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
138			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
139			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
140	2 (6.1)	25 (76)	CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			EC	Polytron 7000 and P 8100 NH3 LC	DEA: 100 ppm / LDL = 5 ppm	S = 0.5
			EC	Polytron 7000 and P 8100 NH3 TL	DEA: 100 ppm / LDL = 2 ppm	S = 0.65*
141			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
142			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
143			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
			EC	Polytron 7000 and P 8100 OVI	as MeOH (20 / 50 / 200 ppm)	S = 1.5 (L)
144	5 (28)		IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
145	5 (24)	10 (49)	IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
			EC	Polytron 7000 and P 8100 NH3 LC	as NH3 x 2 (50 / 100 ppm x 2)	S = 0.5 (L)

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
146	Diethyl ether		Ethoxy ethane	74.1	0.71	35	586	<-20	1.7	1.7	1.9	1.9	1.7	175
	CAS 60-29-7		1,1'-Oxybisethane	2.56 r		95 °F		<-4 °F	(52)	(52)	(59)	(59)	(52)	IIB
	(C <sub>2</sub> H <sub>5</sub> ) <sub>2</sub> O	C <sub>4</sub> H <sub>10</sub> O	Diethyl oxide	111 v		1 ppm = 3.09 mg/m <sup>3</sup>								T4
			Ethyl ether R610											
147	Diethyl ketone		3-Pentanone	86.1	0.81	102	36	7		1.6	1.6	1.6	1.6	455
	CAS 96-22-0	DEK	Pentan-3-one	2.97 r		216 °F		45 °F		(57)	(57)	(57)	(57)	IIB
	(C <sub>2</sub> H <sub>5</sub> ) <sub>2</sub> CO	C <sub>5</sub> H <sub>10</sub> O	Amylketone			1 ppm = 3.59 mg/m <sup>3</sup>								T1
			Dimethylacetone Methacetone Propione											
148	Diethylsulfide		Diethyl thioether	90.2	0.84	92	66	-10	1.0*					
	CAS 352-93-2		1,1'-Thiobisethane	3.11 r		198 °F		14 °F	(284)					
	(C <sub>2</sub> H <sub>5</sub> ) <sub>2</sub> S	C <sub>4</sub> H <sub>10</sub> S	3-Thiapentane			1 ppm = 3.76 mg/m <sup>3</sup>								1 mg/m <sup>3</sup> = 0.27 ppm
149	1,1-Difluoroethane		Ethylidene fluoride	66.1	Gas	-25	Gas	Gas	4.0					455
	CAS 75-37-6		R152a	2.28 r		-13 °F			(110)					IIA
	CHF <sub>2</sub> CH <sub>3</sub>	C <sub>2</sub> H <sub>4</sub> F <sub>2</sub>				1 ppm = 2.75 mg/m <sup>3</sup>								1 mg/m <sup>3</sup> = 0.36 ppm T1
150	Difluoromethane		Methylene fluoride	52.0	Gas	-51.7	Gas	Gas	13.1					648
	CAS 75-10-5		R32	1.79 r		-61 °F			(284)					
	CH <sub>2</sub> F <sub>2</sub>	CH <sub>2</sub> F <sub>2</sub>				1 ppm = 2.17 mg/m <sup>3</sup>								1 mg/m <sup>3</sup> = 0.46 ppm T1
151	1,2-Dimethoxyethane		Ethylene glycol dimethyl ether	90.1	0.87	84	78	-2	1.6	1.6			1.6	197
	CAS 110-71-4	EGDME	Dimethylglycol	3.11 r		183 °F		28 °F	(60)	(60)			(60)	IIB
	(CH <sub>3</sub> OCH <sub>2</sub> ) <sub>2</sub>	C <sub>4</sub> H <sub>10</sub> O <sub>2</sub>	Monoglyme	103 v		1 ppm = 3.75 mg/m <sup>3</sup>								1 mg/m <sup>3</sup> = 0.27 ppm T4
			2,5-Dioxahexane Glycol dimethylether											
152	Dimethoxymethane		Methylal	76.1	0.86	42	426	-31	2.2	2.2	2.2	1.6	2.5	235
	CAS 109-87-5	Formal	Formaldehyde dimethylacetal	2.63 r		108 °F		-24 °F	(70)	(70)	(70)	(5)	(79)	IIB
	CH <sub>2</sub> (OCH <sub>3</sub> ) <sub>2</sub>	C <sub>3</sub> H <sub>8</sub> O <sub>2</sub>	Methylene glycol dimethyl ether	121 v		1 ppm = 3.17 mg/m <sup>3</sup>								1 mg/m <sup>3</sup> = 0.32 ppm T3
			Formal											
153	2,2-Dimethoxypropane		Acetone dimethylacetal	104.2	0.85	83	66	-11	6.0*					
	CAS 77-76-9		Dimethyl dimethoxy methane	3.60 r		181 °F		12 °F	(261)					
	(CH <sub>3</sub> ) <sub>2</sub> C(OCH <sub>3</sub> ) <sub>2</sub>	C <sub>5</sub> H <sub>12</sub> O <sub>2</sub>				1 ppm = 4.34 mg/m <sup>3</sup>								1 mg/m <sup>3</sup> = 0.23 ppm
154	N,N-Dimethyl acetamide		Acetic acid dimethyl amide	87.1	0.94	165	0.5	66	1.8		1.8			
	CAS 127 19-5	DMAC	Acetyl dimethylamine	3.01 r		329 °F		151 °F	(65)	(65)				IIA
	(CH <sub>3</sub> ) <sub>2</sub> NCOCH <sub>3</sub>	C <sub>4</sub> H <sub>9</sub> NO	N,N-Dimethyl methanamide			1 ppm = 3.63 mg/m <sup>3</sup>								1 mg/m <sup>3</sup> = 0.28 ppm
155	Dimethylamine		N-Methylmethanamine	45.1	Gas	7	Gas	Gas	2.8	2.8	2.8	2.8	2.8	400
	CAS 124-40-3	DMA		1.56 r		45 °F			(53)	(53)	(53)	(53)	(53)	IIA
	(CH <sub>3</sub> ) <sub>2</sub> NH	C <sub>2</sub> H <sub>7</sub> N				1 ppm = 1.88 mg/m <sup>3</sup>								1 mg/m <sup>3</sup> = 0.53 ppm T2
156	2-Dimethylaminoethanol		N,N-Dimethylethanolamine	89.1	0.89	131	5.6	31				1.6		220
	CAS 108-01-0		N,N-Dimethyl-2-hydroxyethylamine	3.08 r		268 °F		88 °F				(59)		IIA
	(CH <sub>3</sub> ) <sub>2</sub> NC <sub>2</sub> H <sub>4</sub> OH	C <sub>4</sub> H <sub>11</sub> NO				1 ppm = 3.71 mg/m <sup>3</sup>								1 mg/m <sup>3</sup> = 0.27 ppm T3

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks	
146	400 (1235)	400 (1235)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD	
			IR	PIR 7000 type 334, P 8700 type 334	15 / 100 %LEL // 2550 ppm Gas-Library		
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library		
			IR	PIR 7000 type 340, P 8700 type 340	5 / 100 %LEL // 850 ppm Gas-Library		
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library		
			IR	PIR 3000, P 5310, P 8310	100 %LEL		
			EC	Polytron 7000 and P 8100 OVI	Et2O: 50 / 50 / 200 ppm / LDL = 10 ppm	S = 0.5	
147		200 (718)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL		
			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (\$)		
			IR	Polytron 5700 type 334	100 %LEL (\$)		
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)		
			IR	Polytron 5700 type 340	100 %LEL (?)		
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)		
148			EC	Polytron 7000 and P 8100 H2S LC	as THT (20 / 50 / 100 ppm)	S = 0.3	
149			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL		
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL		
			IR	PIR 7000 type 340, P 8700 type 340	25 / 100 %LEL		
			IR	Polytron 5700 type 340	50 + 100 %LEL		
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)		
150			IR	PIR 7000 type 334, P 8700 type 334	5 / 100 %LEL // 6550 ppm Gas-Library		
			IR	Polytron 5700 type 334	10 + 20 + 50 + 100 %LEL Gas-Library		
			IR	PIR 7000 type 340, P 8700 type 340	5 / 100 %LEL // 6550 ppm Gas-Library		
			IR	Polytron 5700 type 340	10 + 20 + 50 + 100 %LEL Gas-Library		
			IR	PIR 3000, P 5310, P 8310	100 %LEL (&)		
151			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL		
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL		
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL		
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL		
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL		
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)		
152	300 (951)	1000 (3171)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL		
			IR	PIR 7000 type 334, P 8700 type 334	15 / 100 %LEL		
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL		
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL		
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL		
			IR	PIR 3000, P 5310, P 8310	100 %LEL		
153			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)		
			IR	Polytron 5700 type 340	100 %LEL (?)		
154	10 (36)	10 (36)	IR	PIR 7000 type 334, P 8700 type 334	55 / 100 %LEL		
			IR	Polytron 5700 type 334	100 %LEL		
			IR	PIR 7000 type 340, P 8700 type 340	35 / 100 %LEL		
			IR	Polytron 5700 type 340	50 + 100 %LEL		
			IR	PIR 3000, P 5310, P 8310	100 %LEL		
155	2 (3.8)	10 (19)	CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison	
			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL		
			IR	Polytron 5700 type 334	50 + 100 %LEL		
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL		
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL		
			IR	PIR 3000, P 5310, P 8310	100 %LEL		
			EC	Polytron 7000 and P 8100 NH3 LC	DMA: 100 ppm / LDL = 5 ppm		S = 0.5
			EC	Polytron 7000 and P 8100 NH3 TL	DMA: 100 ppm / LDL = 2 ppm		S = 0.65*
			EC	Polytron 8100 NH3 FL	DMA: 100 ppm / LDL = 2 ppm	S = 0.65* / Polytron 8100 only	
156			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL		
			IR	Polytron 5700 type 334	50 + 100 %LEL		
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL		
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL		
			IR	PIR 3000, P 5310, P 8310	100 %LEL		

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
157	Dimethylaminopro- pylamine		N,N-Dimethyl-1,3- diaminopropane	102.2	0.81	134	6	35	1.9	1.2			1.2	219
	CAS 109-55-7	DMAPA	3-Aminopropyl dimethylamine	3.53 r		273 °F		95 °F	(81)	(51)			(51)	IIA
	(CH <sub>3</sub> ) <sub>2</sub> N(CH <sub>2</sub> ) <sub>3</sub> NH <sub>2</sub>	C <sub>5</sub> H <sub>14</sub> N <sub>2</sub>	N,N-Dimethyl-1,3- propandiamine 1-Amino-3- dimethylaminopropane			1 ppm = 4.26 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.23 ppm				T3
158	2,2-Dimethylbutane		Neohexane	86.2	0.64	50	348	< -20	1.2	1.0		1.2		435
	CAS 75-83-2			2.98 r		122 °F		< -4 °F	(43)	(36)		(43)		IIA
	(CH <sub>3</sub> ) <sub>2</sub> CCH <sub>2</sub> CH <sub>3</sub>	C <sub>6</sub> H <sub>14</sub>		101 v		1 ppm = 3.59 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.28 ppm				
159	2,3-Dimethylbutane		Di-i-propyl	86.2	0.66	58	255	< -20	1.2	1.0		1.2		415
	CAS 79-29-8			2.98 r		136 °F		< -4 °F	(43)	(36)		(43)		IIA
	(CH <sub>3</sub> ) <sub>2</sub> CHCH(CH <sub>3</sub> ) <sub>2</sub>	C <sub>6</sub> H <sub>14</sub>		98 v		1 ppm = 3.59 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.28 ppm				T2
160	Dimethyl carbonate		Dimethoxy formic acid anhydride	90.1	1.07	90	53	14	4.2*					455
	CAS 616-38-6	DMC	Carbonic acid dimethyl ester	3.11 r		194 °F		57 °F	(158)					
	CO(OCH <sub>3</sub> ) <sub>2</sub>	C <sub>3</sub> H <sub>6</sub> O <sub>3</sub>				1 ppm = 3.75 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.27 ppm				T1
161	N,N-Dimethyl cyclohexyl amine		N-Cyclohexyl dimethyl amine	127.2	0.85	161	3.6	40	0.9					215
	CAS 98-94-2	DMCHA	Hexahydro-N,N- dimethyl aniline	4.39 r		322 °F		104 °F	(48)					
	C <sub>6</sub> H <sub>11</sub> N(CH <sub>3</sub> ) <sub>2</sub>	C <sub>8</sub> H <sub>17</sub> N	Dimethylamino cyclohexane			1 ppm = 5.30 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.19 ppm				T3
162	Dimethyl disulfide		2,3-Dithiabutane	94.2	1.06	110	28	10	1.1*					370
	CAS 624-92-0	DMDS		3.25 r		230 °F		50 °F	(43)					IIA
	(CH <sub>3</sub> ) <sub>2</sub> S <sub>2</sub>	C <sub>2</sub> H <sub>6</sub> S <sub>2</sub>				1 ppm = 3.93 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.25 ppm				T2
163	Dimethylether		Methoxy methane	46.1	Gas	-25	Gas	Gas	2.7	2.7		3.4	2.7	240
	CAS 115-10-6	DME	Dimethyl oxide	1.59 r		-13 °F			(52)	(52)		(65)	(52)	IIIB
	(CH <sub>3</sub> ) <sub>2</sub> O	C <sub>2</sub> H <sub>6</sub> O	1,1'-Oxybismethane Methyl ether			1 ppm = 1.92 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.52 ppm				T3
164	Dimethylethylamine		N-Ethyl dimethylamine	73.1	0.68	36.5	527	-36	0.9*					190
	CAS 598-56-1	DMEA	N,N-Dimethylethanamine	2.52 r		98 °F		-33 °F	(27)					
	C <sub>2</sub> H <sub>5</sub> N(CH <sub>3</sub> ) <sub>2</sub>	C <sub>4</sub> H <sub>11</sub> N				1 ppm = 3.05 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.33 ppm				T4
165	Dimethylformamide		Formic acid dimethylamide	73.1	0.95	153	3.8	58	2.2	1.8	2.2	2.2	1.8	440
	CAS 68-12-2	DMF	N,N-Dimethylformamide	2.52 r		307 °F		136 °F	(67)	(55)	(67)	(67)	(55)	IIA
	HCON(CH <sub>3</sub> ) <sub>2</sub>	C <sub>3</sub> H <sub>7</sub> NO	N,N-Dimethylmethanamide N-Formyldimethylamine			1 ppm = 3.05 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.33 ppm				T2
166	3,4-Dimethyl hexane		i-Octane	114.2	0.72	118	22	2	0.8	0.8			0.8	305
	CAS 583-48-2		Isooctane	3.94 r		244 °F		36 °F	(38)	(38)			(38)	IIA
	(C <sub>2</sub> H <sub>5</sub> ) <sub>2</sub> CHCH <sub>2</sub> (CH <sub>3</sub> ) <sub>2</sub>	C <sub>8</sub> H <sub>18</sub>		79 v		1 ppm = 4.76 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.21 ppm				T2
167	1,1-Dimethylhydrazine		N,N-Dimethylhydrazine	60.1	0.78	63	145	-18	2.0	2.4	2.0	2.0	2.4	240
	CAS 57-14-7	UDMH	Dimazine	2.07 r		145 °F		0 °F	(50)	(60)	(50)	(50)	(60)	IIIB
	(CH <sub>3</sub> ) <sub>2</sub> N-NH <sub>2</sub>	C <sub>2</sub> H <sub>8</sub> N <sub>2</sub>	unsym-Dimethylhydrazine	96 v		1 ppm = 2.50 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.40 ppm				T3

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
157			IR	PIR 7000 type 334, P 8700 type 334	50 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
158	500 (1796)		CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (?)	
			IR	Polytron 5700 type 334	100 %LEL (?)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
159	500 (1796)		CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (?)	
			IR	Polytron 5700 type 334	100 %LEL (?)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
160			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	10 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
161			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
162			IR	PIR 7000 type 334, P 8700 type 334	85 / 100 %LEL (&)	
			IR	Polytron 5700 type 334	100 %LEL (&)	
			IR	PIR 7000 type 340, P 8700 type 340	40 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
			EC	Polytron 7000 and P 8100 H2S LC	DMDS: 20 / 50 / 100 ppm / LDL = 1 ppm	
163	1000 (1921)		CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD
			IR	PIR 7000 type 334, P 8700 type 334	15 / 100 %LEL // 4050 ppm Gas-Library	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	5 / 100 %LEL // 1350 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
164			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison
			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (\$)	
			IR	Polytron 5700 type 334	100 %LEL (\$)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
165	5 (15)	10 (30)	IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL // 5400 ppm Gas-Library	
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL // 1800 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
166	500 (2379)		CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (?)	
			IR	Polytron 5700 type 334	100 %LEL (?)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
167		0.5 (1.3)	IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (\$)	
			IR	Polytron 5700 type 334	100 %LEL (\$)	
			EC	Polytron 7000 and P 8100 Hydrazine	UDMH: 1 / 1 / 5 ppm / LDL = 0.02 ppm	

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
168	2,3-Dimethylpentane		i-Heptane	100.2	0.70	90	72	-12	1.1			1.1		330
	CAS 565-59-3		Isoheptane	3.46 r		194 °F		10 °F	(46)			(46)		IIA
	C <sub>2</sub> H <sub>5</sub> CH(CH <sub>3</sub> )CH(CH <sub>3</sub> ) <sub>2</sub>	C <sub>7</sub> H <sub>16</sub>		98 v		1 ppm = 4.18 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.24 ppm			T2
169	2,2-Dimethyl propane		Neopentane	72.2	Gas	10	Gas	Gas	1.3			1.4		450
	CAS 463-82-1		Tetramethyl methane	2.49 r		50 °F			(39)			(42)		IIA
	C(CH <sub>3</sub> ) <sub>4</sub>	C <sub>5</sub> H <sub>12</sub>	tert-Butyl methane tert-Pentane			1 ppm = 3.01 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.33 ppm			
170	N,N-Dimethyl-i-propanolamine		1-Dimethylaminopropan-2-ol	103.2	0.86	126	18	35	2.7*					
	CAS 108-16-7			3.56 r		259 °F		95 °F	(116)					IIA
	(CH <sub>3</sub> ) <sub>2</sub> NCH <sub>2</sub> CH(OH)CH <sub>3</sub>	C <sub>5</sub> H <sub>13</sub> NO				1 ppm = 4.30 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.23 ppm			
171	N,N-Dimethyl-i-propylamine		1-Dimethyl aminopropane	87.2	0.72	66	170	< -20	1.1					
	CAS 996-35-0	DMIPA	N,N-Dimethyl-1-propane amine	3.01 r		151 °F		< -4 °F	(40)					IIA
	(CH <sub>3</sub> ) <sub>2</sub> CHN(CH <sub>2</sub> ) <sub>2</sub>	C <sub>6</sub> H <sub>15</sub> N		83 v		1 ppm = 3.63 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.28 ppm			
172	N,N-Dimethyl-n-propyl amine		N,N-Dimethyl-1-propanamine	87.2	0.72	65	173	< -20	1.3					
	CAS 926-63-6	DMPA	Dimethylpropylamine	3.01 r		149 °F		< -4 °F	(47)					IIA
	(CH <sub>3</sub> ) <sub>2</sub> NC <sub>3</sub> H <sub>7</sub>	C <sub>6</sub> H <sub>15</sub> N		98 v		1 ppm = 3.63 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.28 ppm			
173	Dimethyl sulfide		2-Thiapropane	62.1	0.85	37	527	< -20	2.2			2.2		215
	CAS 75-18-3	DMS	Thiobismethane	2.14 r		99 °F		< -4 °F	(57)			(57)		IIA
	(CH <sub>3</sub> ) <sub>2</sub> S	C <sub>2</sub> H <sub>6</sub> S	Methyl thiomethane	100 v		1 ppm = 2.59 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.39 ppm			T3
174	1,4-Dioxane		Diethylene dioxide	88.1	1.03	101	38	11	1.4	1.4	2.0	2.0	1.9	375
	CAS 123-91-1		Diethylene ether	3.04 r		214 °F		52 °F	(51)	(51)	(73)	(73)	(70)	IIIB
	(CH <sub>2</sub> ) <sub>4</sub> O <sub>2</sub>	C <sub>4</sub> H <sub>8</sub> O <sub>2</sub>	1,4-Dioxa cyclohexane p-Dioxane	75 v		1 ppm = 3.67 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.27 ppm			T2
175	1,3-Dioxolane		1,3-Dioxa cyclopentane	74.1	1.06	74	114	-5	2.3	2.3			2.3	245
	CAS 646-06-0		Formaldehyde ethylene acetal	2.56 r		165 °F		23 °F	(71)	(71)			(71)	IIIB
	(CH <sub>2</sub> ) <sub>3</sub> O <sub>2</sub>	C <sub>3</sub> H <sub>6</sub> O <sub>2</sub>	Dihydro-1,3-dioxol	100 v		1 ppm = 3.09 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.32 ppm			T3
176	Di-i-propylamine		Diisopropylamine	101.2	0.72	82	85	-7	1.2	1.2	1.1	1.1	1.2	285
	CAS 108-18-9	DIPA	1-Methylethyl-2-propanamine	3.49 r		180 °F		19 °F	(51)	(51)	(46)	(46)	(51)	IIA
	((CH <sub>3</sub> ) <sub>2</sub> CH) <sub>2</sub> NH	C <sub>6</sub> H <sub>15</sub> N		105 v		1 ppm = 4.22 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.24 ppm			T3
177	Dipropylamine		Di-n-propylamine	101.2	0.72	82	85	-7	1.2	1.2	1.1	1.1	1.2	285
	CAS 142-84-7		N-Propyl-1-propane amine	3.49 r		180 °F		19 °F	(51)	(51)	(46)	(46)	(51)	IIA
	(C <sub>3</sub> H <sub>7</sub> ) <sub>2</sub> NH	C <sub>6</sub> H <sub>15</sub> N		102 v		1 ppm = 4.22 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.24 ppm			T3
178	Dipropylene glycol dimethyl ether		Oxybis(methoxypropane)	162.2	0.90	175	0.74	65	0.7					165
	CAS 111109-77-4	DPDME	Dimethoxy dipropylene glycol	5.60 r		347 °F		149 °F	(47)					IIIB
	CH <sub>3</sub> O(CH <sub>2</sub> ) <sub>3</sub> O(CH <sub>2</sub> ) <sub>3</sub> OCH <sub>3</sub>	C <sub>8</sub> H <sub>18</sub> O <sub>3</sub>	Bis(methoxypropyl)ether			1 ppm = 6.76 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.15 ppm			T4

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
168	500 (2088)		CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (?)	
			IR	Polytron 5700 type 334	100 %LEL (?)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
169	1000 (3008)	1000 (3008)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (?)	
			IR	Polytron 5700 type 334	100 %LEL (?)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
170			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL (?)	corrosive/sensor poison
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
171	1 (3.6)		CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			EC	Polytron 7000 and P 8100 NH3 LC	as NH3 x 2 (50 / 100 ppm x 2)	S = 0.5 (L)
172			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	5 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
173			IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
174	20 (73)	100 (367)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL // 3500 ppm Gas-Library	
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL // 1120 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
175	100 (309)		CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	15 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			EC	Polytron 7000 and P 8100 OVI	as EO x 0.5 (20 / 50 / 200 ppm x 0.5)	S = 2.0 (L)
176		5 (21)	CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
177			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
178			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
179	Di-i-propyl ether		Diisopropylether	102.2	0.72	69	175	<-20	1.0	1.0	1.4	1.4	1.0	405
	CAS 108-20-3		2-Isopropoxy propane	3.53 r		156 °F		<-4 °F	(43)	(43)	(60)	(60)	(43)	IIA
	(CH <sub>3</sub> ) <sub>2</sub> CHOCH(CH <sub>3</sub> ) <sub>2</sub>	C <sub>6</sub> H <sub>14</sub> O	2.2'-Oxybispropane	89 v		1 ppm = 4.26 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.23 ppm			T2
			Isopropyl ether											
			Diisopropyl oxide											
180	Di-n-propyl ether		Dipropyl ether	102.2	0.75	90	73	-18	1.2	1.18		1.3		175
	CAS 111-43-3		1-Propoxypropane	3.53 r		194 °F		0 °F	(51)	(50)		(55)		IIA
	(C <sub>3</sub> H <sub>7</sub> ) <sub>2</sub> O	C <sub>6</sub> H <sub>14</sub> O	1.1'-Oxybispropane	102 v		1 ppm = 54.26 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.23 ppm			T4
181	Disilane		Silicon hexahydride	62.2	Gas	-14	Gas		1.0*					
	CAS 1590-87-0	DS	Silico ethane	2.15 r		7 °F			(26)					
	Si <sub>2</sub> H <sub>6</sub>	H <sub>6</sub> Si <sub>2</sub>				1 ppm = 2.59 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.39 ppm			
182	Divinyl benzene		Diethenyl benzene	130.2	0.91	195	0.9	64			1.1	0.7		
	CAS 1321-74-0	DVB	Vinylstyrene	4.49 r		383 °F		147 °F			(60)	(38)		
	C <sub>6</sub> H <sub>4</sub> (CH=CH <sub>2</sub> ) <sub>2</sub>	C <sub>10</sub> H <sub>10</sub>				1 ppm = 5.43 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.18 ppm			
183	Divinylether		Divinyloxide	70.1	0.77	28	737	<-20	1.7			1.7		360
	CAS 109-93-3	DVE	Vinylether	2.42 r		82 °F		<-4 °F	(50)			(50)		IIIB
	(CH <sub>2</sub> =CH) <sub>2</sub> O	C <sub>4</sub> H <sub>6</sub> O	1.1'-Oxybisethene	97 v		1 ppm = 2.92 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.34 ppm			T2
			Ethenyloxyethene											
184	Dodecamethyl cyclohexasiloxane		Cyclomethicone 6	444.9	0.98	245	0.03		0.43*					
	CAS 540-97-6	D6	DC 246 Fluid	15.36 r		473 °F			(80)					
	(OSi(CH <sub>3</sub> ) <sub>2</sub> ) <sub>6</sub>	C <sub>12</sub> H <sub>36</sub> O <sub>6</sub> Si <sub>6</sub>				1 ppm = 18.54 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.05 ppm			
185	n-Dodecane		Dihexyl	170.3	0.75	216	0.12	80	0.6			0.6		200
	CAS 112-40-3			5.88 r		421 °F		176 °F	(43)			(43)		IIA
	C <sub>12</sub> H <sub>26</sub>	C <sub>12</sub> H <sub>26</sub>				1 ppm = 7.10 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.14 ppm			T4
186	Epichlorohydrin		1-Chloro-2,3-epoxypropane	92.5	1.18	116	16.3	28	2.3	2.3	3.8	3.8	2.3	385
	CAS 106-89-8	ECH	2,3-Epoxypropylchloride	3.19 r		241 °F		82 °F	(89)	(89)	(146)	(146)	(89)	IIIB
	CH <sub>2</sub> ClCHCH <sub>2</sub> O	C <sub>3</sub> H <sub>5</sub> ClO	Chloromethyl oxirane	112 v		1 ppm = 3.85 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.26 ppm			T2
			2-Chloropropylene oxide											
187	1,2-Epoxybutane		Butylene oxide	72.1	0.83	65	177	-15	1.5			1.7		370
	CAS 106-88-7		Ethyl oxirane	2.49 r		149 °F		5 °F	(45)			(51)		
	C <sub>4</sub> H <sub>8</sub> O	C <sub>4</sub> H <sub>8</sub> O	1,2-Butylen oxide	81 v		1 ppm = 3.00 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.33 ppm			T2
188	Ethane		Methylmethane	30.1	Gas	-89	Gas	Gas	2.4	2.4		3.0	2.5	515
	CAS 74-84-0		Dimethyl	1.04 r		-128 °F			(30)	(30)		(38)	(31)	IIA
	C <sub>2</sub> H <sub>6</sub>	C <sub>2</sub> H <sub>6</sub>	R170			1 ppm = 1.25 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.80 ppm			T1
189	Ethanol		Ethyl alcohol	46.1	0.79	78	58	12	3.1	3.1	3.3	3.3	3.1	400
	CAS 64-17-5	EtOH	Methylcarbinol	1.59 r		172 °F		54 °F	(60)	(60)	(63)	(63)	(60)	IIIB
	C <sub>2</sub> H <sub>5</sub> OH	C <sub>2</sub> H <sub>6</sub> O		113 v		1 ppm = 1.92 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.52 ppm			
190	Ethanol amine		2-Aminoethanol	61.1	1.02	172	0.5	85			3.0	3.0		410
	CAS 141-43-5		2-Hydroxyethylamine	2.11 r		342 °F		185 °F			(76)	(76)		IIA
	NH <sub>2</sub> C <sub>2</sub> H <sub>4</sub> OH	C <sub>2</sub> H <sub>7</sub> NO	Colamine			1 ppm = 2.55 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.39 ppm			T2

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
179	200 (852)	500 (2129)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
180			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
181			EC	Polytron 7000 and P 8100 Hydrides	DS: 5 / 20 / 20 ppm / LDL = 0.3 ppm	S = 0.1
182		10 (54)	IR	PIR 7000 type 334, P 8700 type 334	25 / 25 %LEL	only for concentrations < 25 %LEL
183			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	polymerizing - sensor poison
184			IR	PIR 7000 type 334, P 8700 type 334	75 / 100 %LEL (&)	
			IR	Polytron 5700 type 334	100 %LEL (&)	
			IR	PIR 7000 type 340, P 8700 type 340	55 / 100 %LEL (&)	
			IR	Polytron 5700 type 340	100 %LEL (&)	
185			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
186	2T (7.7)	5 (19)	CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison
			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL // 6900 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	40 / 100 %LEL // 9200 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
			EC	Polytron 7000 and P 8100 OV2	ECH: 20 / 50 / 100 ppm / LDL = 5 ppm	S = 0.45
187	1 (3.0)		CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
				EC	Polytron 7000 and P 8100 OV1	as PO x 2 (20 / 50 / 200 ppm x 2)
188			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL // 3750 ppm Gas-Library	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL // 2500 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			OP	Polytron Pulsar 2	1 // 4 / 8 LELm	CSF = 1.40 (Propane = 1.00) / LEL = 3.0
189	500 (960)	1000 (1921)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD
			IR	PIR 7000 type 334, P 8700 type 334	15 / 100 %LEL // 4650 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	5 / 100 %LEL // 1550 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL	performance approved
					EC	Polytron 7000 and P 8100 OV1
190	0.2 (0.51)	3 (7.6)	IR	PIR 7000 type 340, P 8700 type 340	10 / 10 %LEL (&)	only for concentrations < 10 %LEL

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
191	2-Ethoxyethanol		Ethyl glycol	90.1	0.93	135	5	40	1.8	1.7	1.7	1.7	1.8	235
	CAS 110-80-5	EGEE	Ethylene glycol monoethyl ether	3.11 r		275 °F		104 °F	(68)	(64)	(64)	(64)	(68)	IIB
	C <sub>2</sub> H <sub>5</sub> OC <sub>2</sub> H <sub>4</sub> OH	C <sub>4</sub> H <sub>10</sub> O <sub>2</sub>	Ethyl cellosolve Monoethyl glycol ether Oxitol			1 ppm = 3.75 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.27 ppm				T3
192	2-Ethoxyethyl acetate		2-Ethoxyethanol acetate	132.2	0.98	156	2.7	51	1.2	1.2	1.7	1.7	1.2	380
	CAS 111-15-9	EGEEA	Ethyl glycol acetate	4.56 r		313 °F		124 °F	(66)	(66)	(94)	(94)	(66)	IIA
	CH <sub>3</sub> COOC <sub>2</sub> H <sub>4</sub> OC <sub>2</sub> H <sub>5</sub>	C <sub>6</sub> H <sub>12</sub> O <sub>3</sub>	Ethylene glycol monoethyl ether acetate Acetic acid 2- ethoxyethylester Cellosolve acetate			1 ppm = 5.51 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.16 ppm				T2
193	1-Ethoxy-2-propanol		1-Ethoxypropan-2-ol	104.2	0.90	130	10	42	1.3					255
	CAS 1569-02-4	PGEE	Propylene glycol monoethyl ether	3.60 r		266 °F		108 °F	(56)					IIB
	C <sub>2</sub> H <sub>5</sub> OCH <sub>2</sub> CH(OH)CH <sub>3</sub>	C <sub>5</sub> H <sub>12</sub> O <sub>2</sub>	2-Propylenglycol-1- ethylether			1 ppm = 4.34 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.23 ppm				T3
194	Ethoxy trifluoro butenone		4-Ethoxy-1.1.1-trifluoro- 3-buten-2-one	168.1	1.18	159	3		1.4*					
	CAS 17129-06-5	ETFBO		5.80 r		318 °F			(98)					
	C <sub>2</sub> H <sub>5</sub> OCH=CHC(O)CF <sub>3</sub>	C <sub>6</sub> H <sub>7</sub> F <sub>3</sub> O <sub>2</sub>				1 ppm = 7.00 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.14 ppm				
195	Ethyl acetate		Acetic acid ethyl ester	88.1	0.90	77	98	-4	2.0	2.0	2.0	2.0	2.2	470
	CAS 141-78-6		Ethanoic acid ethyl ester	3.04 r		171 °F		25 °F	(73)	(73)	(73)	(73)	(81)	IIA
	CH <sub>3</sub> COOC <sub>2</sub> H <sub>5</sub>	C <sub>4</sub> H <sub>8</sub> O <sub>2</sub>	Ethyl ethanoate	122 v		1 ppm = 3.67 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.27 ppm				T1
196	Ethyl acrylate		Acrylic acid ethyl ester	100.1	0.92	100	39	9	1.7	1.4	1.4	1.4	1.4	350
	CAS 140-88-5		2-Propenoic acid ethyl ester	3.46 r		212 °F		48 °F	(71)	(58)	(58)	(58)	(58)	IIB
	CH <sub>2</sub> =CHCOOC <sub>2</sub> H <sub>5</sub>	C <sub>5</sub> H <sub>8</sub> O <sub>2</sub>	Ethyl propenoate	115 v		1 ppm = 4.17 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.24 ppm				T2
197	Ethylamine		Aminoethane	45.1	Gas	17	Gas	Gas	3.5	3.5	3.5	3.5	2.68	385
	CAS 75-04-7		Monoethylamine	1.56 r		63 °F			(66)	(66)	(66)	(66)	(50)	IIA
	C <sub>2</sub> H <sub>5</sub> NH <sub>2</sub>	C <sub>2</sub> H <sub>7</sub> N	Ethane amine R631			1 ppm = 1.88 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.53 ppm				T2
198	Ethylbenzene		Phenylethane	106.2	0.87	136	9.8	23	1.0	0.8	0.8	0.8	1.0	430
	CAS 100-41-4		Ethylbenzol	3.67 r		277 °F		73 °F	(44)	(35)	(35)	(35)	(44)	IIB
	C <sub>6</sub> H <sub>5</sub> C <sub>2</sub> H <sub>5</sub>	C <sub>8</sub> H <sub>10</sub>		76 v		1 ppm = 4.43 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.23 ppm				T2
199	Ethylbromide		Bromoethane	109.0	1.46	38	513	n. a.	6.7	6.7	6.8	6.8	6.7	510
	CAS 74-96-4		Bromoethyl	3.76 r		100 °F			(304)	(304)	(309)	(309)	(304)	IIB
	C <sub>2</sub> H <sub>5</sub> Br	C <sub>2</sub> H <sub>5</sub> Br	Monobromoethane	312 v		1 ppm = 4.54 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.22 ppm				T1

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
191	2 (7.5)	200 (751)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
192	2 (11)	100 (551)	IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
193	50 (217)		CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL // 3250 ppm Gas-Library	
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL // 1300 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
194			IR	PIR 7000 type 334, P 8700 type 334	40 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	35 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
195	200 (734)	400 (1468)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL // 3300 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL // 3300 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL	performance approved
			OP	Polytron Pulsar 2	1 // 4 / 8 LELm	CSF = 0.68 (Propane = 1.00) / LEL = 2.0
196	2 (8.3)	25 (104)	IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	25 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			EC	Polytron 7000 and P 8100 OVI	as Aald x 2 (50 / 100 / 200 ppm x 2)	S = 0.15 (L)
197	5 (9.4)	10 (19)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	corrosive/sensor poison
			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (\$)	
			IR	Polytron 5700 type 334	100 %LEL (\$)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (\$)	
			IR	Polytron 5700 type 340	100 %LEL (\$)	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (\$)	
			EC	Polytron 7000 and P 8100 NH3 LC	EA: 100 ppm / LDL = 5 ppm	S = 0.7
			EC	Polytron 7000 and P 8100 NH3 TL	EA: 100 ppm / LDL = 1 ppm	S = 1.0*
			EC	Polytron 8100 NH3 FL	EA: 100 ppm / LDL = 1 ppm	S = 1.0* / Polytron 8100 only
198	20 (89)	100 (443)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL // 2400 ppm Gas-Library	
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	30 / 100 %LEL // 2400 ppm Gas-Library	
			IR	Polytron 5700 type 340	50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
199		200 (908)	IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
200	Ethyl-tert-butylether		tert-Butyl ethyl ether	102.2	0.74	73	135	-19	1.2					
	CAS 637-92-3	ETBE	2-Methyl-2-ethoxy propane	3.53 r		163 °F		-2 °F	(51)					
	C <sub>2</sub> H <sub>5</sub> OC(CH <sub>3</sub> ) <sub>3</sub>	C <sub>8</sub> H <sub>14</sub> O	2-Ethoxy-2-methyl propane	103 v		1 ppm = 4.26 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.23 ppm				
			Ethyl-1,1-dimethyl ethyl ether											
201	201 Ethylchloride		Chloroethyl	64.5	Gas	12	Gas	Gas	3.6	3.6	3.8	3.8	3.6	510
	CAS 75-00-3		Chloroethane	2.23 r		54 °F			(97)	(97)	(102)	(102)	(97)	IIA
	C <sub>2</sub> H <sub>5</sub> Cl	C <sub>2</sub> H <sub>5</sub> Cl	Monochloroethane			1 ppm = 2.69 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.37 ppm				T1
			R160											
202	Ethyl chloroformate		Ethoxycarbonyl chloride	108.5	1.14	93	55	16	3.7*					500
	CAS 541-41-3		Ethyl chlorocarbonate	3.75 r		199 °F		61 °F	(167)					IIA
	ClCOOC <sub>2</sub> H <sub>5</sub>	C <sub>3</sub> H <sub>5</sub> ClO <sub>2</sub>	Chloroformic acid ethyl ester			1 ppm = 4.52 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.22 ppm				T1
			Ethyl chloromethanoate											
203	Ethylcyclobutane		Ethylcyclo-tetramethylene	84.2	0.73	71		<-20	1.2	1.2		1.2	1.2	210
	CAS 4806-61-5			2.91 r		160 °F		<-4 °F	(42)	(42)		(42)	(42)	IIA
	(CH <sub>2</sub> ) <sub>3</sub> CHC <sub>2</sub> H <sub>5</sub>	C <sub>6</sub> H <sub>12</sub>		86 v		1 ppm = 3.51 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.29 ppm				T3
204	Ethylcyclohexane		Ethylhexamethylene	112.2	0.79	132	13	<21	0.9	0.9		0.9	0.9	260
	CAS 1678-91-7			3.87 r		270 °F		<70 °F	(42)	(42)		(42)	(42)	IIA
	(CH <sub>2</sub> ) <sub>5</sub> CHC <sub>2</sub> H <sub>5</sub>	C <sub>8</sub> H <sub>16</sub>		80 v		1 ppm = 4.68 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.21 ppm				T3
205	Ethylcyclopentane		Ethylpentamethylene	98.2	0.77	103	41	<21	1.1	1.05		1.1	1.05	260
	CAS 1640-89-7			3.39 r		217 °F		<70 °F	(45)	(43)		(45)	(43)	IIA
	(CH <sub>2</sub> ) <sub>4</sub> CHC <sub>2</sub> H <sub>5</sub>	C <sub>7</sub> H <sub>14</sub>		88 v		1 ppm = 4.09 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.24 ppm				T3
206	Ethylene		Ethene	28.1	Gas	-104	Gas	Gas	2.4	2.3		2.7	2.3	440
	CAS 74-85-1		Olefiant gas	0.97 r		-155 °F			(28)	(27)		(32)	(27)	IIB
	CH <sub>2</sub> =CH <sub>2</sub>	C <sub>2</sub> H <sub>4</sub>	R1150			1 ppm = 1.17 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.85 ppm				T2
207	207 Ethylenediamine		1,2-Diaminoethane	60.1	0.90	116	12.4	34		2.5	2.5	2.5	2.7	385
	CAS 107-15-3	EDA	1,2-Ethanediamine	2.07 r		241 °F		93 °F		(63)	(63)	(63)	(68)	IIA
	NH <sub>2</sub> -C <sub>2</sub> H <sub>4</sub> -NH <sub>2</sub>	C <sub>2</sub> H <sub>8</sub> N <sub>2</sub>	Dimethylenediamine			1 ppm = 2.50 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.40 ppm				T2
208	Ethylene glycol		1,2-Ethandiol	62.1	1.11	197	0.07	111	3.2		3.2	3.2		410
	CAS 107-21-1		Ethane-1,2-diol	2.14 r		387 °F		232 °F	(83)		(83)	(83)		IIB
	HOCH <sub>2</sub> CH <sub>2</sub> OH	C <sub>2</sub> H <sub>6</sub> O <sub>2</sub>	1,2-Dihydroxyethane			1 ppm = 2.59 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.39 ppm				T2
			Glycol											
			2-Hydroxyethanol											
209	Ethylene imine		Aziridine	43.1	0.83	55	227	-13	3.6	3.3	3.3	3.3		320
	CAS 151-56-4		Aminoethylene	1.49 r		131 °F		9 °F	(65)	(59)	(59)	(59)		IIB
	(CH <sub>2</sub> ) <sub>2</sub> NH	C <sub>2</sub> H <sub>3</sub> N	Azirane	117 v		1 ppm = 1.80 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.56 ppm				T2
			Azacyclopropane											

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
200			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
201	40 (108)	1000 (2688)	CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL // 7200 ppm Gas-Library	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL // 5400 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
202			IR	PIR 7000 type 334, P 8700 type 334	15 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
203			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
204			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
205			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (?)	
			IR	Polytron 5700 type 334	100 %LEL (?)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
206			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD
			IR	PIR 7000 type 334, P 8700 type 334	40 / 100 %LEL // 9200 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL	performance approved
			IR	GasSecure GS01	100 %LEL	not measurable by ultrasonic sensor
			EC	Polytron 7000 and P 8100 OVI	C2H4: 20 / 50 / 100 ppm / LDL = 5 ppm	S = 1.3
			OP	Polytron Pulsar 2	1 // 4 / 8 LELm	Special version for Ethylene
207		10	IR	PIR 7000 type 340, P 8700 type 340	30 / 100 %LEL	
		(25)	IR	Polytron 5700 type 340	50 + 100 %LEL	
			EC	Polytron 7000 and P 8100 NH3 LC	as NH3 x 5 (50 / 100 ppm x 5)	S = 0.2 (L)
208	10 (26)		IR	PIR 7000 type 340, P 8700 type 340	10 / 10 %LEL (&)	only for concentrations < 10 %LEL
209			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL (?)	corrosive/sensor poison

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
210	Ethylene oxide		1,2-Epoxyethane	44.1	Gas	10	Gas	Gas	2.6	2.6	3.0	3.0	2.6	435
	CAS 75-21-8	EO	Oxirane	1.52 r		50 °F			(48)	(48)	(55)	(55)	(48)	IIB
	C <sub>2</sub> H <sub>4</sub> O	C <sub>2</sub> H <sub>4</sub> O	Dimethylene oxide							1 mg/m <sup>3</sup> = 0.54 ppm			T2	
211	Ethyl formate		Ethyl methanoate	74.1	0.92	54	266	-20	2.7	2.7	2.8	2.8	2.7	445
	CAS 109-94-4		Formic acid ethyl ester	2.56 r		129 °F		-4 °F	(83)	(83)	(86)	(86)	(83)	IIA
	HCOOC <sub>2</sub> H <sub>5</sub>	C <sub>3</sub> H <sub>6</sub> O <sub>2</sub>	Methanoic acid ethyl ester							1 mg/m <sup>3</sup> = 0.32 ppm			T2	
212	2-Ethylhexanal		2-Ethyl-1-hexanal	128.2	0.82	163	2.4	42		0.9		0.85		185
	CAS 123-05-7		2-Ethylhexaldehyde	4.43 r		325 °F		108 °F		(48)		(45)		IIA
	C <sub>4</sub> H <sub>9</sub> CH(C <sub>2</sub> H <sub>5</sub> )CHO	C <sub>8</sub> H <sub>16</sub> O	2-Ethyl caproaldehyde							1 mg/m <sup>3</sup> = 0.19 ppm			T4	
			Butyl ethyl acetaldehyde											
213	2-Ethylhexanoic acid		2-Ethylcaproic acid	144.2	0.91	227	0.04	105	0.8					
	CAS 149-57-5	2-EHA	i-Octanoic acid	4.98 r		441 °F		221 °F		(48)				IIA
	CH <sub>3</sub> (CH <sub>2</sub> ) <sub>5</sub> CH(C <sub>2</sub> H <sub>5</sub> )COOH	C <sub>9</sub> H <sub>16</sub> O <sub>2</sub>	3-Heptane carboxylic acid							1 mg/m <sup>3</sup> = 0.17 ppm				
			2-Ethylhexoic acid											
214	2-Ethylhexyl acrylate		2-Propenoic acid-2-ethylhexyl ester	184.3	0.89	214	0.13	82	0.8	0.7		0.7		245
	CAS 103-11-7		2-Ethylhexyl-2-propenoate	6.36 r		417 °F		180 °F	(61)	(54)		(54)		T3
	CH <sub>2</sub> =CHCOOCH <sub>2</sub> CH(C <sub>2</sub> H <sub>5</sub> )C <sub>2</sub> H <sub>5</sub>	C <sub>11</sub> H <sub>20</sub> O <sub>2</sub>	Acrylic acid (2-ethylhexyl) ester							1 mg/m <sup>3</sup> = 0.13 ppm				
215	2-Ethyl-1-hexylamine		2-Ethylhexylamine	129.3	0.79	169	1.59	50	0.8*					265
	CAS 104-75-6		1-Amino-2-ethylhexane	4.46 r		336 °F		122 °F		(43)				IIA
	C <sub>4</sub> H <sub>9</sub> CH(C <sub>2</sub> H <sub>5</sub> )CH <sub>2</sub> NH <sub>2</sub>	C <sub>9</sub> H <sub>19</sub> N	2-Ethyl-1-hexanamine							1 mg/m <sup>3</sup> = 0.19 ppm			T3	
			i-Octylamine											
			Isooctylamine											
			3-Aminomethyl heptane											
216	5-Ethylidene-2-norbornene		Ethylidene norbornene	120.2	0.89	146	5.6		0.8*					
	CAS 16219-75-3	ENB	5-Ethylidene-8,9,10-trinorborn-2-ene	4.15 r		295 °F				(40)				
	CH <sub>3</sub> CH=C <sub>7</sub> H <sub>9</sub>	C <sub>9</sub> H <sub>12</sub>	5-Ethylidenebicyclo(2.2.1)hept-2-ene							1 mg/m <sup>3</sup> = 0.20 ppm				
217	Ethyl lactate		Hydroxypropionic acid ethyl ester	118.1	1.03	154	2	46	1.5			1.5		400
	CAS 97-64-3		Lactic acid ethyl ester	4.08 r		309 °F		115 °F		(74)		(74)		IIA
	CH <sub>3</sub> CH(OH)COOC <sub>2</sub> H <sub>5</sub>	C <sub>5</sub> H <sub>10</sub> O <sub>3</sub>	Propanoic acid 2-hydroxy ethylester							1 mg/m <sup>3</sup> = 0.20 ppm			T2	
218	218 Ethyl mercaptan		Ethanethiol	62.1	0.84	35	576	<-20	2.8	2.8	2.8	2.8	2.8	295
	CAS 75-08-1	EtM	Mercaptoethane	2.14 r		95 °F		<-4 °F	(72)	(72)	(72)	(72)	(72)	IIB
	C <sub>2</sub> H <sub>5</sub> SH	C <sub>2</sub> H <sub>6</sub> S	Ethyl sulfhydrate	129 v						1 mg/m <sup>3</sup> = 0.39 ppm			T3	
			Thioethyl alcohol											
219	Ethyl methacrylate		Methacrylic acid ethylester	114.1	0.91	117	16	19	1.4	1.5		1.8	1.5	
	CAS 97-63-2	EMA	2-Methyl-2-propenoic acid ethylester	3.94 r		243 °F		66 °F	(67)	(71)		(86)	(71)	IIA
	CH <sub>2</sub> =C(CH <sub>3</sub> )COOC <sub>2</sub> H <sub>5</sub>	C <sub>6</sub> H <sub>10</sub> O <sub>2</sub>	Ethyl methyl acrylate							1 mg/m <sup>3</sup> = 0.21 ppm				
			Ethyl-2-methyl-2-propenoate											
220	N-Ethylpiperidine		1-Ethylpiperidine	113.2	0.82	131	10.3	17	1.9*					
	CAS 766-09-6	EPP		3.91 r		268 °F		63 °F		(90)				
	C <sub>2</sub> H <sub>5</sub> N(CH <sub>2</sub> ) <sub>5</sub>	C <sub>7</sub> H <sub>15</sub> N								1 mg/m <sup>3</sup> = 0.21 ppm				
221	Ethylpropionate		Propionic acid ethylester	102.1	0.89	99	27	12	1.8			1.9		455
	CAS 105-37-3		Ethyl propanoate	3.52 r		210 °F		54 °F		(77)		(81)		IIA
	C <sub>2</sub> H <sub>5</sub> COOC <sub>2</sub> H <sub>5</sub>	C <sub>5</sub> H <sub>10</sub> O <sub>2</sub>	Propanoic acid ethylester	129 v						1 mg/m <sup>3</sup> = 0.24 ppm			T1	

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
210	IT (1.8)	1 (1.8)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD
			IR	PIR 7000 type 334, P 8700 type 334	15 / 100 %LEL // 3900 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	30 / 100 %LEL // 7800 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			EC	Polytron 7000 and P 8100 OV1	EO: 20 / 50 / 200 ppm / LDL = 5 ppm	S = 1.0
			EC	Polytron 7000 and P 8100 OV2	EO: 20 / 50 / 100 ppm / LDL = 5 ppm	S = 1.0
			EC	Polytron 5100 OV1	EO: 20 + 30 + 50 + 100 + 200 ppm	
			EC	Polytron 5100 OV2	EO: 20 + 30 + 50 + 100 ppm	
EC	Polytron 3000 C2H4O	50 ppm				
211	100 (309)	100 (309)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
			EC	Polytron 7000 and P 8100 OV1	as Et2O (50 / 50 / 200 ppm)	S = 0.4 (L)
212			IR	PIR 7000 type 334, P 8700 type 334	60 / 100 %LEL	
			IR	Polytron 5700 type 334	100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	30 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
213			IR	PIR 7000 type 340, P 8700 type 340	10 / 10 %LEL (&)	only for concentrations < 10 %LEL
214	5 (38)		IR	PIR 7000 type 334, P 8700 type 334	40 / 40 %LEL (&)	only for concentrations < 40 %LEL
		IR	PIR 7000 type 340, P 8700 type 340	20 / 30 %LEL (&)	only for concentrations < 30 %LEL	
215			IR	PIR 7000 type 334, P 8700 type 334	65 / 100 %LEL (&)	
			IR	Polytron 5700 type 334	100 %LEL (&)	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
216		5 (25)	IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
217			IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
218	0.5 (1.3)	0.5c (1.3)	IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			EC	Polytron 7000 and P 8100 H2S LC	EtM: 20 / 50 / 100 ppm / LDL = 1 ppm	S = 0.5
219			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
			EC	Polytron 7000 and P 8100 OV1	as Et2O x 2 (50 / 50 / 200 ppm x 2)	S = 0.2 (L)
220			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
221			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
222	Ethylpropylether		1-Ethoxypropane	88.2	0.73	64	194	<-20	1.7			1.7		
	CAS 628-32-0		Propylethylether	3.04 r		147 °F		<-4 °F	(62)			(62)		IIB
	CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> O	C <sub>3</sub> H <sub>8</sub> O		128 v		1 ppm = 3.68 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.27 ppm			
223	Ethyl vinyl ether		Vinyl ethyl ether	72.1	0.75	36	561	<-20	1.7			1.7		200
	CAS 109-92-2	EVE	Ethoxyethene	2.49 r		97 °F		<-4 °F	(51)			(51)		IIB
	CH <sub>2</sub> =CHOC <sub>2</sub> H <sub>5</sub>	C <sub>4</sub> H <sub>8</sub> O		102 v		1 ppm = 3.00 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.33 ppm			T4
224	Fluorine			38.0	Gas	-188	Gas	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 7782-41-4			1.31 r		-306 °F								
	F <sub>2</sub>	F <sub>2</sub>				1 ppm = 1.58 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.63 ppm			
225	Fluorobenzene		Monofluorobenzene	96.1	1.03	85	81	-15	1.3*					
	CAS 462-06-6	MFB	Phenyl fluoride	3.32 r		185 °F		5 °F	(52)					IIA
	C <sub>6</sub> H <sub>5</sub> F	C <sub>6</sub> H <sub>5</sub> F		76 v		1 ppm = 4.00 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.25 ppm			
226	Formaldehyde		Methanal	30.0	Gas	-19	Gas	Gas	7.0	7.0	7.0	7.0	7.0	424
	CAS 50-00-0		Methyl aldehyde	1.04 r		-2 °F			(88)	(88)	(88)	(88)	(88)	IIB
	HCHO	CH <sub>2</sub> O	Oxomethane			1 ppm = 1.25 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.80 ppm			T1
			Methylene oxide											
227	Formic acid		Methanoic acid	46.0	1.22	101	45	45	16.4	18.0	18.0	18.0	10.0	520
	CAS 64-18-6		Hydrogen carboxylic acid	1.59 r		214 °F		113 °F	(314)	(345)	(345)	(345)	(192)	IIA
	HCOOH	CH <sub>2</sub> O <sub>2</sub>				1 ppm = 1.92 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.52 ppm			T2
228	Furan		Furfuran	68.1	0.94	32	658	<-20	2.3	2.3		2.3	2.3	390
	CAS 110-00-9	Oxol	1,4-Epoxy-1,3-butadiene	2.35 r		90 °F		<-4 °F	(65)	(65)		(65)	(65)	IIB
	(CH <sub>2</sub> ) <sub>4</sub> O	C <sub>4</sub> H <sub>4</sub> O	Oxacyclopentadiene	104 v		1 ppm = 2.84 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.35 ppm			T2
			Divinylene oxide											
229	Furfuraldehyde		Furfural	96.1	1.16	162	1.5	60	2.1	2.1	2.1	2.1	2.1	316
	CAS 98-01-1		2-Furaldehyde	3.32 r		324 °F		140 °F	(84)	(84)	(84)	(84)	(84)	IIB
	C <sub>4</sub> H <sub>3</sub> OCHO	C <sub>5</sub> H <sub>4</sub> O <sub>2</sub>	2-Furancarboxyaldehyde			1 ppm = 4.00 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.25 ppm			T2
			2-Furylmethanal											
		Fural												
230	Furfuryl alcohol		Furfur alcohol	98.1	1.13	171	0.53	75	1.8	1.8	1.8	1.8	1.8	390
	CAS 98-00-0		2-Furylmethanol	3.39 r		340 °F		167 °F	(74)	(74)	(74)	(74)	(74)	IIB
	C <sub>4</sub> H <sub>3</sub> OCH <sub>2</sub> OH	C <sub>5</sub> H <sub>6</sub> O <sub>2</sub>	2-Hydroxymethylfuran			1 ppm = 4.09 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.24 ppm			T2
			2-Furancarbinol											
231	Germanium hydride		Germane	76.6	Gas	-88.5	Gas		2.0*					
	CAS 7782-65-2		Germanium tetrahydride	2.64 r		-127 °F			(64)					
	GeH <sub>4</sub>	H <sub>4</sub> Ge	Germanomethane			1 ppm = 3.19 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.31 ppm			
			Tetrahydrogermane											
232	Germanium tetra- chloride		Tetrachlorogermane	214.4	1.88	82	97	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 10038-98-9			7.40 r		180 °F								
	GeCl <sub>4</sub>	Cl <sub>4</sub> Ge				1 ppm = 8.93 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.11 ppm			
233	Germanium tetrafluoride		Tetrafluorogermane	148.6	Gas	-37	Gas	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 7783-58-6			5.13 r		-35 °F								
	GeF <sub>4</sub>	F <sub>4</sub> Ge				1 ppm = 6.19 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.16 ppm			
234	Heptamethyl trisiloxane		Bis(trimethylsiloxy) methylsilane	222.5	0.82	142			0.5*					
	CAS 1873-88-7		1,1,1,3,5,5,5-Heptamethyltrisiloxane	7.68 r		288 °F			(46)					
	((CH <sub>3</sub> ) <sub>3</sub> SiO) <sub>2</sub> Si(H)CH <sub>3</sub>	C <sub>7</sub> H <sub>22</sub> O <sub>2</sub> Si <sub>3</sub>	Methylbis(trimethylsiloxy) silane			1 ppm = 9.27 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.11 ppm			
235	n-Heptane			100.2	0.68	98	47	-7	0.8	0.85	1.05	1.0	1.1	220
	CAS 142-82-5			3.46 r		208 °F		19 °F	(33)	(35)	(44)	(42)	(46)	IIA
	C <sub>7</sub> H <sub>16</sub>	C <sub>7</sub> H <sub>16</sub>		74 v		1 ppm = 4.18 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.24 ppm			T3
236	1-Heptanol		Heptan-1-ol	116.2	0.82	175	0.15	70	0.9	0.9			1.0	275
	CAS 111-70-6		Heptyl alcohol	4.01 r		347 °F		158 °F	(44)	(44)			(48)	IIB
	C <sub>7</sub> H <sub>15</sub> OH	C <sub>7</sub> H <sub>16</sub> O	1-Hydroxyheptane			1 ppm = 4.84 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.21 ppm			T3

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
222			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
223			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	polymerizing/sensor poison
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
			EC	Polytron 7000 and P 8100 OV1	as EO x 2 (20 / 50 / 200 ppm x 2)	S = 0.5 (L)
224	1 (1.6)	0.1 (0.16)	EC	Polytron 7000 and P 8100 Cl2	F2: 1 / 10 / 100 ppm / LDL = 0.05 ppm	S = 1.0
225			IR	PIR 7000 type 334, P 8700 type 334	70 / 100 %LEL	
			IR	Polytron 5700 type 334	100 %LEL	
226	0.3 (0.38)	0.75 (0.94)	IR	PIR 7000 type 340, P 8700 type 340	10 / 10 %LEL (&)	
			EC	Polytron 7000 and P 8100 OV1	FYDE: 20 / 50 / 100 ppm / LDL = 5 ppm	S = 1.0
227	5 (9.6)	5 (9.6)	EC	Polytron 7000 and P 8100 AC	Acid: 3 / 10 / 30 ppm / LDL = 0.5 ppm	
228			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			EC	Polytron 7000 and P 8100 OV1	as Et2O (50 / 50 / 200 ppm)	S = 0.4 (L)
229		5 (20)	EC	Polytron 7000 and P 8100 OV1	as Aald (50 / 100 / 200 ppm)	S = 0.3 (L)
230		50 (204)	EC	Polytron 7000 and P 8100 OV1	as IPA (100 / 200 / 300 ppm)	S = 0.35 (L)
231		0.2 (0.64)	EC	Polytron 7000 and P 8100 Hydrides	GeH4: 0.3 / 1 / 20 ppm / LDL = 0.05 ppm	S = 0.6
			EC	Polytron 7000 and P 8100 Hydrides SC	GeH4: 0.3 / 1 / 5 ppm / LDL = 0.02 ppm	S = 0.5
232			EC	Polytron 7000 and P 8100 AC	Acid: 3 / 10 / 30 ppm / LDL = 0.5 ppm	
			EC	Polytron 7000 and P 8100 HCl	as SiCl4 (5 / 10 / 20 ppm)	
233			EC	Polytron 7000 and P 8100 AC	GeF4: 3 / 10 / 30 ppm / LDL = 0.5 ppm	
234			IR	PIR 7000 type 334, P 8700 type 334	40 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	25 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
235	500 (2088)	500 (2088)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL // 1700 ppm Gas-Library	
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL // 425 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			OP	Polytron Pulsar 2	1 // 4 / 8 LELm	CSF = 0.67 (Propane = 1.00) / LEL = 0.8
236			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
237	2-Heptanone		Heptan-2-one	114.2	0.82	151	4.5	40		1.1	1.1	1.1	1.1	305
	CAS 110-43-0	MAK	Methyl amyl ketone	3.94 r		304 °F		104 °F		(52)	(52)	(52)	(52)	IIA
	CH <sub>3</sub> COC <sub>5</sub> H <sub>11</sub>	C <sub>7</sub> H <sub>14</sub> O	n-Amyl methyl ketone Methyl pentyl ketone			1 ppm = 4.76 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.21 ppm				T2
238	1-Heptene		Hept-1-ene	98.2	0.70	94	64	-8	1.0					250
	CAS 592-76-7		1-Heptylene	3.39 r		201 °F		18 °F	(41)					IIIB
	C <sub>7</sub> H <sub>14</sub> CH=CH <sub>2</sub>	C <sub>7</sub> H <sub>14</sub>		88 v		1 ppm = 4.09 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.24 ppm				T3
239	Hexamethyl cyclotrisiloxane			222.5	1.02	134		0.4*						
	CAS 541-05-9	HMCTS		7.68 r		273 °F		(37)						
	Si <sub>3</sub> O <sub>3</sub> (CH <sub>3</sub> ) <sub>6</sub>	C <sub>6</sub> H <sub>18</sub> O <sub>3</sub> Si <sub>3</sub>				1 ppm = 9.27 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.11 ppm				
240	Hexamethyldisilazane		Bis-trimethylsilyl-amine	161.4	0.77	127	20	0.8*						
	CAS 999-97-3	HMDS	Tetramethyl-3-aza-2.4- disilapentane	5.57 r		261 °F		(54)						
	(CH <sub>3</sub> ) <sub>3</sub> Si-NH-Si(CH <sub>3</sub> ) <sub>3</sub>	C <sub>6</sub> H <sub>19</sub> NSi <sub>2</sub>				1 ppm = 6.73 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.15 ppm				
241	Hexamethyldisiloxane		Tetramethyl-3-oxa-2.4- disilapentane	162.4	0.76	101	20	-8	0.7		310			
	CAS 107-46-0	HMDSO		5.61 r		214 °F		18 °F	(47)		IIIB			
	(CH <sub>3</sub> ) <sub>2</sub> Si-O-Si(CH <sub>3</sub> ) <sub>3</sub>	C <sub>6</sub> H <sub>18</sub> OSi <sub>2</sub>		93 v		1 ppm = 6.77 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.15 ppm				
242	n-Hexane		Hexyl hydride	86.2	0.66	69	162	< -20	1.0	1.0	1.1	1.1	1.0	230
	CAS 110-54-3			2.98 r		156 °F		< -4 °F	(36)	(36)	(40)	(40)	(36)	IIA
	C <sub>6</sub> H <sub>14</sub>	C <sub>6</sub> H <sub>14</sub>		81 v		1 ppm = 3.59 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.28 ppm				T3
243	1-Hexanol		Hexan-1-ol	102.2	0.82	157	0.9	60	1.1	1.1		1.2	1.2	280
	CAS 111-27-3		Hexyl alcohol	3.53 r		315 °F		140 °F	(47)	(47)		(51)	(51)	IIIB
	C <sub>6</sub> H <sub>13</sub> OH	C <sub>6</sub> H <sub>14</sub> O	Amyl carbinol 1-Hydroxyhexane			1 ppm = 4.26 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.23 ppm				T3
244	2-Hexanone		Hexan-2-one	100.2	0.81	128	12.8	23	1.2	1.2		1.2	1.2	420
	CAS 591-78-6	MBK	Methyl butyl ketone	3.46 r		262 °F		73 °F	(50)	(50)		(50)	(50)	IIA
	CH <sub>3</sub> COC <sub>4</sub> H <sub>9</sub>	C <sub>6</sub> H <sub>12</sub> O	Butyl methyl ketone	93 v		1 ppm = 4.18 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.24 ppm				T2
245	3-Hexanone		Hexan-3-one	100.2	0.82	123	13.5	20	1.0			1.0		
	CAS 589-38-8		Ethylpropylketone	3.46 r		253 °F		68 °F	(42)			(42)		IIA
	C <sub>2</sub> H <sub>5</sub> COC <sub>3</sub> H <sub>7</sub>	C <sub>6</sub> H <sub>12</sub> O		76 v		1 ppm = 4.18 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.24 ppm				
246	1-Hexene		Hex-1-ene	84.2	0.67	63	199	< -20	1.2			1.2		255
	CAS 592-41-6		Butyl ethylene	2.91 r		145 °F		< -4 °F	(42)			(42)		IIIB
	C <sub>4</sub> H <sub>9</sub> CH=CH <sub>2</sub>	C <sub>6</sub> H <sub>12</sub>	Hexylene	94 v		1 ppm = 3.51 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.29 ppm				T3
247	2-Hexene		Hex-2-en	84.2	0.69	69	193	1.2*						
	CAS 592-43-8			2.91 r		156 °F		(42)						
	CH <sub>3</sub> (CH <sub>2</sub> ) <sub>2</sub> CH=CHCH <sub>3</sub>	C <sub>6</sub> H <sub>12</sub>				1 ppm = 3.51 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.29 ppm				

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
237	50 (238)	100 (476)	IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
238			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			EC	Polytron 7000 and P 8100 OVI	as Aald x 2 (50 / 100 / 200 ppm x 2)	S = 0.15 (L)
239			IR	PIR 7000 type 334, P 8700 type 334	65 / 100 %LEL	
			IR	Polytron 5700 type 334	100 % LEL	
			IR	PIR 7000 type 340, P 8700 type 340	50 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
240			IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			EC	Polytron 7000 and P 8100 OVI	as MeOH (20 / 50 / 200 ppm)	S = 1.5 (L)
241			IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL // 2450 ppm Gas-Library	
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL // 1400 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			EC	Polytron 7000 and P 8100 OVI	as MeOH (20 / 50 / 200 ppm)	S = 0.95 (L)
242	50 (180)	500 (1796)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL // 2500 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	5 / 100 %LEL // 500 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL	performance approved
			OP	Polytron Pulsar 2	1 // 4 / 8 LELm	CSF = 0.77 (Propane = 1.00) / LEL = 1.0
243	50 (213)		IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
244	5 (21)	100 (418)	CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
245			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
246			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL // 2400 ppm Gas-Library	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL // 960 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			EC	Polytron 7000 and P 8100 OVI	as Aald x 2 (50 / 100 / 200 ppm x 2)	S = 0.15 (L)
247			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (?)	
			IR	Polytron 5700 type 334	100 %LEL (?)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
248	n-Hexamine		1-Aminohexane	101.2	0.77	131	10.6	27	2.1*					
	CAS 111-26-2		1-Hexanamine	3.49 r		268 °F		81 °F	(89)					IIA
	C <sub>6</sub> H <sub>13</sub> NH <sub>2</sub>	C <sub>6</sub> H <sub>15</sub> N				1 ppm = 4.22 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.24 ppm				
249	Hydrazine		Diazane	32.0	1.01	113	21	40	4.7		2.9			270
	CAS 302-01-2		Diamine	1.10 r		235 °F		104 °F	(63)		(39)			
	H <sub>2</sub> N-NH <sub>2</sub>	H <sub>4</sub> N <sub>2</sub>				1 ppm = 1.33 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.75 ppm				T3
250	Hydrogen		R 702	2.0	Gas	-253	Gas	Gas	4.0	4.0		4.0	4.0	560
	CAS 1333-74-0			0.07 r		-423 °F			(3.3)	(3.3)		(3.3)	(3.3)	II C
	H <sub>2</sub>	H <sub>2</sub>				1 ppm = 0.08 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 12.00 ppm				T1
251	Hydrogen bromide		Hydrobromic acid	80.9	Gas	-67	Gas	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 10035-10-6			2.79 r		-89 °F								
	HBr	HBr				1 ppm = 3.37 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.30 ppm				
252	Hydrogen chloride		Hydrochloric acid	36.5	Gas	-85	Gas	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 7647-01-0		Muriatic acid	1.26 r		-121 °F								
	HCl	HCl				1 ppm = 1.52 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.66 ppm				
253	Hydrogen cyanide		Hydrocyanic acid	27.0	0.69	26	817	< -20	5.4	5.4	5.6	5.6	5.4	535
	CAS 74-90-8	AC	Formonitrile	0.93 r		79 °F		< -4 °F	(61)	(61)	(63)	(63)	(61)	II B
	HCN	CHN	Prussic acid			1 ppm = 1.13 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.89 ppm				T1
254	Hydrogen fluoride		Hydrofluoric acid	20.0	Gas	19.5	Gas	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 7664-39-3	HF-A		0.69 r		67 °F								
	HF	HF				1 ppm = 0.83 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 1.20 ppm				
255	Hydrogen iodide		Hydroiodic acid anhydrous	127.9	Gas	-35	Gas	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 10034-85-2			4.41 r		-31 °F								
	HI	HI				1 ppm = 5.33 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.19 ppm				
256	Hydrogen peroxide		Hydrogen dioxide	34.0	1.24	107	1.9	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 7722-84-1		Hydroperoxide	1.17 r		225 °F								
	H <sub>2</sub> O <sub>2</sub>	H <sub>2</sub> O <sub>2</sub>	Dihydrogen dioxide			1 ppm = 1.42 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.71 ppm				
257	Hydrogen selenide		Selane	81.0	Gas	-41	Gas		4.0*					
	CAS 7783-07-5		Selenium hydride	2.80 r		-42 °F			(135)					
	H <sub>2</sub> Se	H <sub>2</sub> Se	Dihydrogen selenide			1 ppm = 3.38 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.30 ppm				
258	Hydrogen sulfide		Hydrosulfuric acid	34.1	Gas	-60	Gas	Gas	3.9	4.0	4.0	4.0	4.0	270
	CAS 7783-06-4		Sulfuretted hydrogen	1.18 r		-76 °F			(55)	(57)	(57)	(57)	(57)	II B
	H <sub>2</sub> S	H <sub>2</sub> S	Sulfane			1 ppm = 1.42 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.70 ppm				T3
259	Isoprene		2-Methyl-1,3-butadiene	68.1	0.68	34	604	< -20	1.0			1.5		220
	CAS 78-79-5			2.35 r		93 °F		< -4 °F	(28)			(43)		II B
	CH <sub>2</sub> =C(CH <sub>3</sub> )CH=CH <sub>2</sub>	C <sub>5</sub> H <sub>8</sub>		62 v		1 ppm = 2.84 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.35 ppm				T3
260	Lead tetraethyl		Tetraethyl lead	323.4	1.65	180	0.3	80	1.8		1.8	1.8		
	CAS 78-00-2	TEL	Tetraethylplumbane	11.16 r		356 °F		176 °F	(243)		(243)	(243)		
	Pb(C <sub>2</sub> H <sub>5</sub> ) <sub>4</sub>	C <sub>8</sub> H <sub>20</sub> Pb				1 ppm = 13.48 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.07 ppm				
261	D-Limonene		p-Mentha-1,8-diene	136.2	0.84	176	2	48	0.7					235
	CAS 5989-27-5		1-Methyl-4-isopropenyl-1-cyclohexene	4.70 r		349 °F		118 °F	(40)					IIA
	CH <sub>2</sub> C(CH <sub>3</sub> )C <sub>6</sub> H <sub>8</sub> CH <sub>3</sub>	C <sub>10</sub> H <sub>16</sub>	4-Isopropenyl-1-methyl cyclohexene (R)-(+)-Limonene Carvene			1 ppm = 5.68 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.18 ppm				T3

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks	
248			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)		
			IR	Polytron 5700 type 340	100 %LEL (?)		
249	0.017T (0.023)	1 (1.3)	EC	Polytron 8100 NH3 TH	100 %LEL	S = 1.0	
			EC	Polytron 7000 and P 8100 Hydrazine	N2H4: 0.3 / 1 / 5 ppm / LDL = 0.02 ppm		
			EC	Polytron 5100 Hydrazine	N2H4: 0.3 + 0.5 + 1 + 3 + 5 + 10 + 20 ppm		
			EC	Polytron 3000 Hydrazine	1 ppm		
250			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD	
			EC	Polytron 7000 and P 8100 H2	H2: 500 / 1000 / 3000 ppm / LDL = 15 ppm		
			EC	Polytron 5100 H2	50 + 100 + 200 + 300 + 500 + 1000 ppm		+ 2000 + 3000 ppm
			EC	Polytron 3000 H2	1000 or 3000 ppm		
251	2 (6.7)	3c (10)	EC	Polytron 7000 and P 8100 AC	HBr: 3 / 10 / 30 ppm / LDL = 0.5 ppm	S = 1.0	
			EC	Polytron 7000 and P 8100 HCl	HBr: 20 / 30 / 100 ppm / LDL = 1 ppm		
			EC	Polytron 3000 AC	3 or 10 ppm		
252	2 (3.0)	5c (7.6)	EC	Polytron 7000 and P 8100 AC	HCl: 3 / 10 / 30 ppm / LDL = 0.5 ppm	S = 1.0	
			EC	Polytron 7000 and P 8100 HCl	HCl: 20 / 30 / 100 ppm / LDL = 1 ppm		
			EC	Polytron 3000 AC	10 ppm		
			EC	Polytron 3000 HCl	30 ppm		
253		10 (11)	EC	Polytron 7000 and P 8100 HCN LC	HCN: 5 / 50 / 50 ppm / LDL = 0.1 ppm		
			EC	Polytron 5100 HCN LC	5 + 10 + 20 + 30 + 50 ppm		
254	1 (0.83)	3 (2.5)	EC	Polytron 7000 and P 8100 AC	HF: 3 / 10 / 30 ppm / LDL = 0.5 ppm		
			EC	Polytron 5100 AC	HF: 3 + 5 + 10 + 20 + 30 ppm		
			EC	Polytron 3000 AC	10 ppm		
255			EC	Polytron 7000 and P 8100 AC	Acid: 3 / 10 / 30 ppm / LDL = 0.5 ppm		
256		1 (1.4)	EC	Polytron 7000 and P 8100 H2O2 HC	H2O2: 1000 / 4000 / 7000 ppm / LDL = 100 ppm	+ 200 + 300 ppm	
			EC	Polytron 7000 and P 8100 H2O2 LC	H2O2: 1 / 5 / 300 ppm / LDL = 0.1 ppm		
			EC	Polytron 5100 H2O2 LC	1 + 3 + 5 + 10 + 20 + 30 + 50 + 100 ppm		
257	0.015 (0.051)	0.05 (0.17)	EC	Polytron 7000 and P 8100 Hydrides	SeH2: 0.5 / 1 / 1 ppm / LDL = 0.3 ppm	S = 0.4	
258	5 (7.1)	4 (5.7)	EC	Polytron 7000 and P 8100 H2S	H2S: 5 / 50 / 100 ppm / LDL = 0.5 ppm	P 8100 performance approved (FM)	
			EC	Polytron 7000 and P 8100 H2S HC	H2S: 100 / 500 / 1000 ppm / LDL = 10 ppm		
			EC	Polytron 7000 and P 8100 H2S LC	H2S: 10 / 50 / 100 ppm / LDL = 1 ppm	P 8100 performance approved (FM)	
			EC	Polytron 5100 H2S	5 + 10 + 20 + 30 + 50 + 100 ppm		
			EC	Polytron 5100 H2S HC	100 + 200 + 300 + 500 + 1000 ppm		
			EC	Polytron 5100 H2S LC	10 + 20 + 50 + 100 ppm		
			EC	Polytron 3000 H2S	20 or 50 or 100 ppm		
			EC	Polytron 2000 H2S	20 or 100 ppm		
259	3 (8.5)		CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	polymerizing/sensor poison	
			IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL		
			IR	Polytron 5700 type 334	50 + 100 %LEL		
			IR	PIR 7000 type 340, P 8700 type 340	45 / 100 %LEL		
			IR	Polytron 5700 type 340	50 + 100 %LEL		
			IR	PIR 3000, P 5310, P 8310	100 %LEL		
260	0.004 (0.054)	0.006 (0.081)	IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)		
			IR	Polytron 5700 type 340	100 %LEL (?)		
261	5 (28)		IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL		
			IR	Polytron 5700 type 334	50 + 100 %LEL		
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL		
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL		
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)		

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
262	Mesityl oxide		4-Methyl-3-penten-2-one	98.1	0.85	130	11	24		1.6	1.4	1.4	1.4	340
	CAS 141-79-7	MO	4-Methylpent-3-en-2-one	3.39 r		266 °F		75 °F		(65)	(57)	(57)	(57)	IIA
	(CH <sub>3</sub> ) <sub>2</sub> C=CHCOCH <sub>3</sub>	C <sub>6</sub> H <sub>10</sub> O	Methyl-i-butylene ketone			1 ppm = 4.09 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.24 ppm				T2
			Methyl-i-butenyl ketone i-Propylidene acetone Isopropylidene acetone Isobutenyl methyl ketone											
263	Methacrylic acid		2-Methyl-2-propenoic acid	86.1	1.02	161	0.87	74	1.0			1.6		355
	CAS 79-41-4		a-Methylacrylic acid	2.97 r		322 °F		165 °F	(36)			(57)		II B
	CH <sub>2</sub> =C(CH <sub>3</sub> )COOH	C <sub>4</sub> H <sub>6</sub> O <sub>2</sub>				1 ppm = 3.59 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.28 ppm				
264	Methane		Methyl hydride	16.0	Gas	-162	Gas	Gas	4.4	4.4		5.0	4.4	595
	CAS 74-82-8		R50	0.55 r		-260 °F			-29	-29		(33)	-29	IIA
	CH <sub>4</sub>	CH <sub>4</sub>				1 ppm = 0.67 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 1.50 ppm				T1
265	Methanol		Methyl alcohol	32.0	0.79	65	129	9	6.0	6.0	6.0	6.0	5.5	440
	CAS 67-56-1	MeOH	Carbinol	1.10 r		149 °F		48 °F	(80)	(80)	(80)	(80)	-73	IIA
	CH <sub>3</sub> OH	CH <sub>4</sub> O		152 v		1 ppm = 1.33 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.75 ppm				T2
266	3-Methoxybutanol		3-Methoxy-1-butanol	104.2	0.93	161	1.3	74	1.5*					
	CAS 2517-43-3		1.3-Butyleneglycol monomethyl ether	3.60 r		322 °F		165 °F	(65)					II B
	CH <sub>3</sub> CH(OCH <sub>3</sub> )CH <sub>2</sub> CH <sub>2</sub> OH	C <sub>5</sub> H <sub>12</sub> O <sub>2</sub>				1 ppm = 4.34 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.23 ppm				
267	4-Methoxy cyclohexanone		p-Methoxy cyclohexanone	128.2	0.98	189			1.2**					
	CAS 13482-23-0			4.43 r		372 °F			(64)					
	CH <sub>3</sub> OCH(CH <sub>2</sub> ) <sub>4</sub> CO	C <sub>7</sub> H <sub>12</sub> O <sub>2</sub>				1 ppm = 5.34 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.19 ppm				
268	Methoxy dihydropyran		3,4-Dihydro-2-methoxypyran	114.1	1.00	127	13		1.0*					
	CAS 4454-05-1	MDHP	2-Methoxy-3,4-dihydropyran	3.94 r		261 °F			(48)					
	OCH=CH(CH <sub>2</sub> ) <sub>2</sub> CHOCH <sub>3</sub>	C <sub>6</sub> H <sub>10</sub> O <sub>2</sub>				1 ppm = 4.75 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.21 ppm				
269	2-Methoxyethanol		Ethylene glycol monomethyl ether	76.1	0.97	124	12	39	2.5	1.8	1.8	1.8	2.4	285
	CAS 109-86-4	EGME	Methyl glycol	2.63 r		255 °F		102 °F	(79)	(57)	(57)	(57)	-76	II B
	CH <sub>3</sub> OC <sub>2</sub> H <sub>4</sub> OH	C <sub>3</sub> H <sub>8</sub> O <sub>2</sub>	Glycol monomethyl ether			1 ppm = 3.17 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.32 ppm				T3
			Monomethyl glycol ether Methyl oxitol Methyl cellosolve											
270	1-Methoxy-2-propanol		Propylene glycol monomethyl ether	90.1	0.92	120	13	32	1.8		1.6	1.6		270
	CAS 107-98-2	PGME	1.2-Propanediol-1-monomethyl ether	3.11 r		248 °F		90 °F	-68		(60)	(60)		II B
	CH <sub>3</sub> OCH <sub>2</sub> CH(OH)CH <sub>3</sub>	C <sub>4</sub> H <sub>10</sub> O <sub>2</sub>	1-Methyl propylene glycol-2			1 ppm = 3.75 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.27 ppm				T3
271	Methoxy propoxy propanol		Dipropylene glycol monomethyl ether	148.2	0.95	184	0.7	70	1.1	1.1	1.1	1.1		270
	CAS 34590-94-8	DPGME	Dipropylene glycol methyl ether	5.12 r		363 °F		158 °F	-68	-68	-68	-68		IIA
	CH <sub>3</sub> OC <sub>3</sub> H <sub>6</sub> OC <sub>3</sub> H <sub>6</sub> OH	C <sub>7</sub> H <sub>16</sub> O <sub>3</sub>	(2-Methoxymethylethoxy)-1-propanol			1 ppm = 6.18 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.16 ppm				T3
			(2-Methoxymethylethoxy)propanol Methyl dipropylene glycol											

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
262	2 (8.2)	25 (102)	EC	Polytron 7000 and P 8100 OVI	as EtOH (100 / 200 / 300 ppm)	S = 0.6 (L)
			IR	PIR 7000 type 334, P 8700 type 334	40 / 100 %LEL // 16000 ppm Gas-Library	
263	50 (179)	20 (72)	EC	Polytron 7000 and P 8100 OVI	as Aald x 2 (50 / 100 / 200 ppm x 2)	S = 0.15 (L)
			EC	Polytron 7000 and P 8100 AC	Acid: 3 / 10 / 30 ppm / LDL = 0.5 ppm	
264			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD IR
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL // 100 vol-% Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	30 / 100 %LEL // 13200 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL	performance approved
			IR	GasSecure GS01	100 %LEL	min. conc. for ultrasonic sensor: 4400 ppm
			OP	Polytron Pulsar 2	1 // 4 / 8 LELm	CSF = 0.58 (Propane = 1.00) / LEL = 2.5
265	200 (267)	200 (267)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD
			IR	PIR 7000 type 334, P 8700 type 334	10 / 100 %LEL // 5500 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	5 / 100 %LEL // 2500 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL (!)	performance approved
			EC	Polytron 5700 type 334	MeOH: 20 / 50 / 200 ppm / LDL = 5 ppm	S = 1.2
266			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
267			IR	PIR 7000 type 334, P 8700 type 334	60 / 100 %LEL (&)	
			IR	Polytron 5700 type 334	100 %LEL (&)	
			IR	PIR 7000 type 340, P 8700 type 340	35 / 100 %LEL (&)	
			IR	Polytron 5700 type 340	50 + 100 %LEL (&)	
268			IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
269	1 (3.2)	25 (79)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
EC	Polytron 7000 and P 8100 OVI	as MeOH (20 / 50 / 200 ppm)	S = 1.4 (L)			
270	100 (375)	100 (375)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL // 3200 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL // 1600 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 % LEL	
271	50 (309)	100 (618)	IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
272	1-Methoxy-2-propyl acetate		Acetic acid methoxy propylic ester	132.2	0.97	150	3.1	43	1.3			1.5		
	CAS 108-65-6	PGMEA	2-Methoxy-1-methylethyl acetate	4.56 r		302 °F		109 °F	(72)			-83		IIB
	CH <sub>3</sub> COOC <sub>3</sub> H <sub>7</sub> OCH <sub>3</sub>	C <sub>6</sub> H <sub>12</sub> O <sub>3</sub>	Propylene glycol methylether acetate			1 ppm = 5.51 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.18 ppm				
1-Methoxy-2-acetoxypropane														
273	Methyl acetate		Acetic acid methyl ester	74.1	0.93	57	228	-13	3.1	3.1	3.1	3.1	3.2	505
	CAS 79-20-9		Methyl ethanoate	2.56 r		135 °F		9 °F	(96)	(96)	(96)	(96)	(99)	IIA
	CH <sub>3</sub> COOCH <sub>3</sub>	C <sub>3</sub> H <sub>6</sub> O <sub>2</sub>	Ethanoic acid methyl ester	154 v		1 ppm = 3.09 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.32 ppm				T1
274	Methyl acrylate		Acrylic acid methyl ester	86.1	0.95	80	91	-3	2.0	1.95	2.8	2.8	2.4	415
	CAS 96-33-3		Methyl propenoate	2.97 r		176 °F		27 °F	(72)	-70	(100)	(100)	-86	IIB
	CH <sub>2</sub> =CHCOOCH <sub>3</sub>	C <sub>5</sub> H <sub>8</sub> O <sub>2</sub>	Methoxycarbonyl ethylene	113 v		1 ppm = 3.59 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.28 ppm				T2
275	Methylallylchloride		3-Chloro-2-methylprop-1-ene	90.6	0.93	72	138	-12	2.3	2.1		3.2		476
	CAS 563-47-3		2-Methylallyl chloride	3.13 r		162 °F		10 °F	-87	(79)		-121		IIA
	CH <sub>2</sub> =C(CH <sub>3</sub> )CH <sub>2</sub> Cl	C <sub>4</sub> H <sub>7</sub> Cl	3-Chloro-i-butene Methallyl chloride	140 v		1 ppm = 3.78 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.26 ppm				T1
276	Methylamine		Aminomethane	31.1	Gas	-6	Gas	Gas	4.9	4.2	4.9	4.9	4.2	430
	CAS 74-89-5	MA	Monomethylamine	1.07 r		21 °F			(63)	(54)	(63)	(63)	(54)	IIA
	CH <sub>3</sub> NH <sub>2</sub>	CH <sub>5</sub> N	R630			1 ppm = 1.30 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.77 ppm				T2
277	Methyl-i-amyl ketone		5-Methyl-2-hexanone	114.2	0.89	144	6.4	35	1.0		1.0	1.0		455
	CAS 110-12-3	MiAK	i-Amyl methyl ketone	3.94 r		291 °F		95 °F	(48)		(48)	(48)		IIA
	CH <sub>3</sub> COCH <sub>2</sub> CH <sub>2</sub> CH(CH <sub>3</sub> ) <sub>2</sub>	C <sub>7</sub> H <sub>14</sub> O	Isoamyl methyl ketone i-Pentyl methyl ketone Isopentyl methyl ketone 2-Methyl-5-hexanone			1 ppm = 4.76 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.21 ppm				T1
278	Methyl bromide		Bromomethane	94.9	Gas	4	Gas	Gas	8.6		10.0	10.0		535
	CAS 74-83-9		Monobromomethane	3.28 r		39 °F			(340)		(395)	(395)		IIA
	CH <sub>3</sub> Br	CH <sub>3</sub> Br	R40B1			1 ppm = 3.95 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.25 ppm				T1
279	2-Methylbutane		i-Pentane	72.2	0.62	28	761	< -20	1.3	1.3		1.4	1.3	420
	CAS 78-78-4		Isopentane	2.49 r		82 °F		< -4 °F	(39)	(39)		(42)	(39)	IIA
	CH <sub>3</sub> CH(CH <sub>3</sub> )C <sub>2</sub> H <sub>5</sub>	C <sub>5</sub> H <sub>12</sub>	Ethyl dimethyl methane Isoamyl hydride	94 v		1 ppm = 3.01 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.33 ppm				T2
280	3-Methylbutanoic acid		3-Methylbutyric acid	102.1	0.93	176	0.5	78	1.4					385
	CAS 503-74-2	3MBTA	i-Pentanoic acid	3.52 r		349 °F		172 °F	(60)					IIA
	(CH <sub>3</sub> ) <sub>2</sub> CHCH <sub>2</sub> COOH	C <sub>5</sub> H <sub>10</sub> O <sub>2</sub>	Isopentanoic acid i-Valeric acid Isovaleric acid			1 ppm = 4.25 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.24 ppm				T2
281	2-Methyl-1-butanol		2-Methyl butyl alcohol	88.2	0.82	129	3.3	40	1.2					340
	CAS 137-32-6		i-Pentanol	3.04 r		264 °F		104 °F	(44)					IIA
	C <sub>2</sub> H <sub>5</sub> CH(CH <sub>3</sub> )CH <sub>2</sub> OH	C <sub>5</sub> H <sub>12</sub> O	Isopentanol sec-Butyl carbinol			1 ppm = 3.68 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.27 ppm				T2

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
272	50 (275)		IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL // 2100 ppm Gas-Library	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL // 700 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
273	200 (618)	200 (618)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	15 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
274	5 (18)	10 (36)	CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL // 6000 ppm Gas-Library	
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	35 / 100 %LEL // 6000 ppm Gas-Library	
			IR	Polytron 5700 type 340	50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
275			EC	Polytron 7000 and P 8100 OVI	as Aald x 2 (50 / 100 / 200 ppm x 2)	S = 0.15 (L)
			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison
276	10 (13)	10 (13)	IR	PIR 7000 type 340, P 8700 type 340	100 %LEL	corrosive/sensor poison
			IR	Polytron 5700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
277	20 (95)	100 (476)	CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
			EC	Polytron 7000 and P 8100 NH3 LC	MA: 100 ppm / LDL = 5 ppm	S = 0.7
278	1 (4.0)	20c (79)	EC	Polytron 7000 and P 8100 NH3 TL	MA: 100 ppm / LDL = 1 ppm	S = 1.0*
			EC	Polytron 8100 NH3 FL	MA: 100 ppm / LDL = 1 ppm	S = 1.0* / Polytron 8100 only
279	1000 (3008)	1000 (3008)	IR	PIR 7000 type 334, P 8700 type 334	100 %LEL	
			IR	Polytron 5700 type 340	100 %LEL (?)	
280			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
281	20 (74)	100 (368)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	15 / 100 %LEL // 1950 ppm Gas-Library	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	5 / 100 %LEL // 650 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
282			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			OP	Polytron Pulsar 2	1 // 4 / 8 LELm	CSF = 1.02 (Propane = 1.00) / LEL = 1.3
			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	30 / 100 %LEL	
283			IR	Polytron 5700 type 340	50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
282	Methyl-tert-butyl ether		tert-Butyl methyl ether	88.2	0.74	55	270	<-20	1.6	1.5		1.6	1.5	435
	CAS 1634-04-4	MTBE	2-Methoxy-2-methyl propane	3.04 r		131 °F		<-4 °F	-59	(55)		-59	(55)	IIA
	CH <sub>3</sub> OC(CH <sub>3</sub> ) <sub>3</sub>	C <sub>5</sub> H <sub>12</sub> O	2-Methyl-2-methoxy propane	119 v		1 ppm = 3.68 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.27 ppm				T2
283	Methyl-i-butylketone		4-Methyl-2-pentanone	100.2	0.80	116	19	14	1.2	1.2	1.2	1.2	1.2	475
	CAS 108-10-1	MiBK	i-Propyl acetone	3.46 r		241 °F		57 °F	(50)	(50)	(50)	(50)	(50)	IIA
	(CH <sub>3</sub> ) <sub>2</sub> CHCH <sub>2</sub> COCH <sub>3</sub>	C <sub>6</sub> H <sub>12</sub> O	Isopropyl acetone	94 v		1 ppm = 4.18 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.24 ppm				T1
			Isobutyl methylketone											
			i-Butyl methylketone											
		Hexone												
			Methyl isobutyl ketone											
284	2-Methyl-3-butyn-2-ol		Dimethyl ethynyl carbinol	84.1	0.86	104	20	20	1.6					350
	CAS 115-19-5		Ethynyl dimethyl carbinol	2.90 r		219 °F		68 °F	(56)					IIIB
	CHCC(CH <sub>3</sub> ) <sub>2</sub> OH	C <sub>5</sub> H <sub>8</sub> O	3-Methyl butynol	98 v		1 ppm = 3.50 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.29 ppm				T2
285	Methyl chloride		Chloromethyl	50.5	Gas	-24	Gas	Gas	7.6	7.6	8.1	8.1	7.6	625
	CAS 74-87-3		Chloromethane	1.74 r		-11 °F			(160)	(160)	(170)	(170)	(160)	IIA
	CH <sub>3</sub> Cl	CH <sub>3</sub> Cl	Monochloromethane			1 ppm = 2.10 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.48 ppm				T1
			R40											
286	Methyl chloroformate		Chloroformic acid methyl ester	94.5	1.22	72	127	10	7.5	7.5			7.5	475
	CAS 79-22-1		Methoxycarbonyl chloride	3.26 r		162 °F		50 °F	-295	-295			-295	IIA
	ClCOOCH <sub>3</sub>	C <sub>2</sub> H <sub>3</sub> ClO <sub>2</sub>	Methyl chloromethanoate	362 v		1 ppm = 3.94 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.25 ppm				T1
			Methyl chlorocarbonate											
287	Methylcyclohexane		Hexahydrotoluene	98.2	0.77	101	48	-4	1.1	1.0	1.2	1.2	1.15	260
	CAS 108-87-2	MCH	Cyclohexylmethane	3.39 r		214 °F		25 °F	(45)	(41)	(49)	(49)	(47)	IIA
	(CH <sub>2</sub> ) <sub>5</sub> CHCH <sub>3</sub>	C <sub>7</sub> H <sub>14</sub>	Toluene hexahydride	88 v		1 ppm = 4.09 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.24 ppm				T3
288	Methylcyclopentane		Methylpentamethylene	84.2	0.75	72	150	<-10		1.0		1.0	1.0	315
	CAS 96-37-7	MCP		2.91 r		162 °F		<14 °F		(35)		(35)	(35)	IIA
	C <sub>5</sub> H <sub>9</sub> CH <sub>3</sub>	C <sub>6</sub> H <sub>12</sub>				1 ppm = 3.51 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.29 ppm				T2
289	Methyl ethyl carbonate		Carbonic acid ethyl methyl ester	104.1	1.01	107	10.7		2.0**					
	CAS 623-53-0	EMC	Ethyl methyl carbonate	3.59 r		225 °F			-87					
	(CH <sub>3</sub> O)CO(OC <sub>2</sub> H <sub>5</sub> )	C <sub>4</sub> H <sub>8</sub> O <sub>3</sub>				1 ppm = 4.34 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.23 ppm				
290	Methylethyl ether		Ethylmethyl ether	60.1	Gas	7.4	Gas	Gas	2.0	2.0		2.0	2.0	190
	CAS 540-67-0		Methoxy ethane	2.07 r		45 °F			(50)	(50)		(50)	(50)	IIIB
	C <sub>2</sub> H <sub>5</sub> OCH <sub>3</sub>	C <sub>3</sub> H <sub>8</sub> O				1 ppm = 2.50 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.40 ppm				T4
291	2-Methyl-4-ethylhexane		4-Ethyl-2-methylhexane	128.3	0.72	134		21	0.7					280
	CAS 3074-75-7		i-Nonane	4.43 r		273 °F		70 °F	(37)					IIA
	(CH <sub>3</sub> ) <sub>2</sub> CHCH <sub>2</sub> CH(C <sub>2</sub> H <sub>5</sub> ) <sub>2</sub>	C <sub>9</sub> H <sub>20</sub>	Isononane	78 v		1 ppm = 5.35 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.19 ppm				T3
292	Methyl ethyl ketone		2-Butanone	72.1	0.80	80	105	-10	1.5	1.5	1.4	1.4	1.8	475
	CAS 78-93-3	MEK	Butan-2-one	2.49 r		176 °F		14 °F	(45)	(45)	(42)	(42)	(54)	IIIB
	CH <sub>3</sub> COC <sub>2</sub> H <sub>5</sub>	C <sub>4</sub> H <sub>8</sub> O	Methyl propanone	84 v		1 ppm = 3.00 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.33 ppm				T1
			Ethyl methyl ketone											
			Methyl acetone											

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
282	50 (184)		CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL // 2400 ppm Gas-Library	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL // 800 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
283	20 (84)	100 (418)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL // 3000 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL // 1200 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
284	0.9 (3.2)		CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL (?)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
285	50 (105)	100 (210)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	corrosive/sensor poison
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL // 15200 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL // 7600 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL (!)	
286	0.2 (0.79)		IR	PIR 7000 type 334, P 8700 type 334	10 / 100 %LEL // 7500 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL // 7500 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
287	200 (818)	500 (2046)	CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL // 3000 ppm Gas-Library	
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	5 / 100 %LEL // 500 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
288	500 (1754)		IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
289			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	25 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
290			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
291			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
292	200 (601)	200 (601)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD
			IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL // 4500 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	25 / 100 %LEL // 3000 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	50 + 100 %LEL Gas-Library	performance approved
			OP	Polytron Pulsar 2	1 // 4 / 8 LELm	CSF = 0.51 (Propane = 1.00) / LEL = 1.5

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
293	Methylethyl sulfide		Methylthioethane	76.2	0.84	66	198	<-15	1.8					
	CAS 624-89-5		2-Thiabutane	2.63 r		151 °F		<5 °F	(57)					IIA
	CH <sub>3</sub> SC <sub>2</sub> H <sub>5</sub>	C <sub>3</sub> H <sub>8</sub> S		102 v		1 ppm = 3.18 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.31 ppm				
294	Methylfluoride		Fluoromethane	34.0	Gas	-78	Gas	Gas	5.6*					
	CAS 593-53-3		R41	1.17 r		-108 °F			(79)					
	CH <sub>3</sub> F	CH <sub>3</sub> F				1 ppm = 1.42 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.71 ppm				
295	Methyl formate		Formic acid methyl ester	60.1	0.97	32	638	<-20	5.0	5.0	4.5	4.5	5.0	450
	CAS 107-31-3		Methyl methanoate	2.07 r		90 °F		<-4 °F	(125)	(125)	(113)	(113)	(125)	IIA
	HCOOCH <sub>3</sub>	C <sub>2</sub> H <sub>4</sub> O <sub>2</sub>	Methanoic acid methyl ester	193 v		1 ppm = 2.50 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.40 ppm				T2
296	2-Methylhexane		i-Heptane	100.2	0.68	90		-10	1.0			1.0		280
	CAS 591-76-4		Isoheptane	3.46 r		194 °F		14 °F	(42)			(42)		IIA
	(CH <sub>3</sub> ) <sub>2</sub> CHC <sub>4</sub> H <sub>9</sub>	C <sub>7</sub> H <sub>16</sub>	Dimethylbutylmethane	92 v		1 ppm = 4.18 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.24 ppm				T3
297	3-Methylhexane		i-Heptane	100.2	0.69	92		-11						280
	CAS 589-34-4		Isoheptane	3.46 r		198 °F		12 °F						IIA
	C <sub>2</sub> H <sub>5</sub> CH(CH <sub>3</sub> )C <sub>3</sub> H <sub>7</sub>	C <sub>7</sub> H <sub>16</sub>				1 ppm = 4.18 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.24 ppm				T3
298	Methyl hydrazine		Monomethylhydrazine	46.1	0.88	87	50	-8	2.5		2.5	2.5		190
	CAS 60-34-4	MMH		1.59 r		189 °F		18 °F	(48)		(48)	(48)		
	CH <sub>3</sub> NH-NH <sub>2</sub>	CH <sub>6</sub> N <sub>2</sub>		82 v		1 ppm = 1.92 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.52 ppm				T4
299	Methyl iodide		Iodomethane	141.9	2.28	42	441		8.5		n. a.			355
	CAS 74-88-4	MeI	Halon 10001	4.90 r		108 °F			-503					
	CH <sub>3</sub> I	CH <sub>3</sub> I				1 ppm = 5.91 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.17 ppm				
300	Methyl mercaptan		Methanethiol	48.1	Gas	6	Gas	Gas	4.1	4.1	3.9	3.9	4.1	360
	CAS 74-93-1	MeM	Mercaptomethane	1.66 r		43 °F			(82)	(82)	(78)	(78)	(82)	IIA
	CH <sub>3</sub> SH	CH <sub>4</sub> S	Thiomethanol			1 ppm = 2.00 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.50 ppm				T2
301	Methyl methacrylate		Methacrylic acid methyl ester	100.1	0.94	101	40	10	1.7	1.7	1.7	1.7	1.7	430
	CAS 80-62-6	MMA	Methyl-2-methyl-2-propenoate	3.46 r		214 °F		50 °F	-71	-71	-71	-71	-71	IIA
	CH <sub>2</sub> =C(CH <sub>3</sub> )COOCH <sub>3</sub>	C <sub>5</sub> H <sub>8</sub> O <sub>2</sub>	2-Methyl-2-propenoic acid methyl ester	113 v		1 ppm = 4.17 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.24 ppm				T2
302	N-Methyl morpholine		4-Methyl morpholine	101.2	0.91	116	30	13	2.2*					
	CAS 109-02-4	NMM		3.49 r		241 °F		55 °F	(93)					
	(CH <sub>2</sub> ) <sub>4</sub> ONCH <sub>3</sub>	C <sub>5</sub> H <sub>11</sub> NO				1 ppm = 4.22 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.24 ppm				
303	2-Methyl pentane		Dimethylpropylmethane	86.2	0.65	60	227	<-20	1.2			1.2		300
	CAS 107-83-5		i-Hexane	2.98 r		140 °F		<-4 °F	(43)			(43)		IIA
	CH <sub>3</sub> CH(CH <sub>3</sub> )C <sub>3</sub> H <sub>7</sub>	C <sub>6</sub> H <sub>14</sub>	Isohexane	99 v		1 ppm = 3.59 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.28 ppm				T3
304	3-Methyl pentane		i-Hexane	86.2	0.66	63	203	<-20	1.2			1.2		300
	CAS 96-14-0		Isohexane	2.98 r		145 °F		<-4 °F	(43)			(43)		IIA
	CH <sub>3</sub> CH <sub>2</sub> CH(CH <sub>3</sub> )CH <sub>2</sub> CH <sub>3</sub>	C <sub>6</sub> H <sub>14</sub>	Diethylmethylmethane	98 v		1 ppm = 3.59 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.28 ppm				T3
			1.2.3-Trimethylpropane											

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
293			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (\$)	
			IR	Polytron 5700 type 334	100 %LEL (\$)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (\$)	
			IR	Polytron 5700 type 340	100 %LEL (\$)	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
294			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (?)	
			IR	Polytron 5700 type 334	100 %LEL (?)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
295	50 (125)	100 (250)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	15 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
		IR	PIR 3000, P 5310, P 8310	100 %LEL		
296	500 (2088)	500 (2088)	IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
		IR	PIR 3000, P 5310, P 8310	100 %LEL (?)		
297	500 (2088)	500 (2088)	IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
		IR	PIR 3000, P 5310, P 8310	100 %LEL (?)		
298			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			EC	Polytron 7000 and P 8100 Hydrazine	MMH: 1 / 1 / 5 ppm / LDL = 0.02 ppm	S = 0.6
299		5 (30)	EC	Polytron 7000 and P 8100 CO	CO: 50 / 300 / 1000 ppm	S approx. 1.0
300	0.5 (1.0)	10c (20)	EC	Polytron 7000 and P 8100 H2S LC	MeM: 20 / 50 / 100 ppm / LDL = 1 ppm	S = 0.6
301	50 (209)	100 (417)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL // 4250 ppm Gas-Library	
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL // 3400 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
		EC	Polytron 7000 and P 8100 OV2	MMA: 20 / 50 / 100 ppm / LDL = 5 ppm	S = 0.5	
302			IR	PIR 7000 type 334, P 8700 type 334	15 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	5 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
303	500 (1796)		CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
304	500 (1796)		CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	15 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
305	4-Methyl-2-pentanol		4-Methylpentan-2-ol	102.2	0.81	131	4.9	37	1.0	1.14	1.0	1.1	1.14	335
	CAS 108-11-2	MiBC	1,3-Dimethyl butanol	3.53 r		268 °F		99 °F	(43)	(49)	(43)	(47)	(49)	IIA
	(CH <sub>3</sub> ) <sub>2</sub> CHCH <sub>2</sub> CH(OH)CH <sub>3</sub>	C <sub>6</sub> H <sub>14</sub> O	4-Methyl-2-amyl alcohol											T2
			4-Methyl-2-pentyl alcohol Methyl-i-butyl carbinol Methyl isobutyl carbinol											
306	Methylpropionate		Propanoic acid methylester	88.1	0.91	80	84	-2	2.4			2.5		465
	CAS 554-12-1		Methylpropanoate	3.04 r		176 °F		28 °F	(88)			-92		
	C <sub>2</sub> H <sub>5</sub> COOCH <sub>3</sub>	C <sub>4</sub> H <sub>8</sub> O <sub>2</sub>		145 v		1 ppm = 3.67 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.27 ppm			T1
307	Methylpropylether		1-Methoxypropane	74.1	0.73	39	507	<-20	1.7					
	CAS 557-17-5		Methyl-n-propylether	2.56 r		102 °F		<-4 °F	(52)					IIIB
	CH <sub>3</sub> OC <sub>3</sub> H <sub>7</sub>	C <sub>4</sub> H <sub>10</sub> O		108 v		1 ppm = 3.09 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.32 ppm			
308	Methyl propyl ketone		2-Pentanone	86.1	0.81	102	37	7	1.5		1.5	1.5		445
	CAS 107-87-9	MPK	Pentan-2-one	2.97 r		216 °F		45 °F	(54)		(54)	(54)		IIA
	CH <sub>3</sub> COCC <sub>3</sub> H <sub>7</sub>	C <sub>5</sub> H <sub>10</sub> O	Propyl methyl ketone	99 v		1 ppm = 3.59 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.28 ppm			T2
			1-Ethyl acetone											
309	Methyl-i-propyl ketone		3-Methyl-2-butanone	86.1	0.81	94	53	-1	1.4					475
	CAS 563-80-4	MIPK	3-Methyl butan-2-one	2.97 r		201 °F		30 °F	(50)					IIA
	CH <sub>3</sub> COCH(CH <sub>3</sub> ) <sub>2</sub>	C <sub>5</sub> H <sub>10</sub> O	1,1-Dimethyl acetone	93 v		1 ppm = 3.59 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.28 ppm			T1
			i-Propyl methylketone Isopropyl methylketone 2-Acetyl propane											
310	2-Methylpyridine		Picoline	93.1	0.94	128	12	27	1.4	1.2			1.2	535
	CAS 109-06-8		2-Picoline	3.21 r		262 °F		81 °F	(54)	(47)			(47)	IIA
	(C <sub>5</sub> H <sub>4</sub> N)CH <sub>3</sub>	C <sub>6</sub> H <sub>7</sub> N	o-Picoline	87 v		1 ppm = 3.88 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.26 ppm			T1
311	3-Methylpyridine		3-Picoline	93.1	0.96	144	6	36	1.3	1.4			1.4	537
	CAS 108-99-6		m-Picoline	3.21 r		291 °F		97 °F	(50)	(54)			(54)	IIA
	(C <sub>5</sub> H <sub>4</sub> N)CH <sub>3</sub>	C <sub>6</sub> H <sub>7</sub> N				1 ppm = 3.88 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.26 ppm			T1
312	N-Methyl pyrrole		1-Methyl pyrrole	81.1	0.91	112	22	15						
	CAS 96-54-8		1-Methyl-1H-pyrrole	2.80 r		234 °F		59 °F						
	C <sub>4</sub> H <sub>4</sub> NCH <sub>3</sub>	C <sub>5</sub> H <sub>7</sub> N				1 ppm = 3.38 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.30 ppm			
313	N-Methyl-2-pyrrolidone		1-Methyl-2-pyrrolidinone	99.1	1.03	203	0.3	86	1.5					265
	CAS 872-50-4	NMP	1-Methyl-2-pyrrolidone	3.42 r		397 °F		187 °F	(62)					IIA
	(CH <sub>3</sub> ) <sub>2</sub> CONCH <sub>3</sub>	C <sub>5</sub> H <sub>9</sub> NO	N-Methylpyrrolidone			1 ppm = 4.13 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.24 ppm			T3
314	Methylsilane		Silaethane	46.1	Gas	-58	Gas	Gas	1.3					160
	CAS 992-94-9	MMS	Monomethylsilane	1.59 r		-72 °F			-25					
	SiH <sub>3</sub> CH <sub>3</sub>	CH <sub>3</sub> Si				1 ppm = 1.92 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.52 ppm			T4
315	3-Methylstyrene		m-Methylstyrene	118.2	0.90	170	3.5	45	1.9*					490
	CAS 100-80-1		3-Vinyltoluene	4.08 r		338 °F		113 °F	(94)					
	CH <sub>3</sub> C <sub>6</sub> H <sub>4</sub> CH=CH <sub>2</sub>	C <sub>9</sub> H <sub>10</sub>	m-Vinyltoluene			1 ppm = 4.93 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.20 ppm			T1
			1-Methyl-3-vinylbenzene 1-Ethenyl-3-methylbenzene											
316	4-Methylstyrene		p-Methylstyrene	118.2	0.90	170	1.5	46	1.1*					490
	CAS 622-97-9		4-Vinyltoluene	4.08 r		338 °F		115 °F	(54)					
	CH <sub>3</sub> C <sub>6</sub> H <sub>4</sub> CH=CH <sub>2</sub>	C <sub>9</sub> H <sub>10</sub>	p-Vinyltoluene			1 ppm = 4.93 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.20 ppm			T1
			1-Methyl-4-vinylbenzene 1-Ethenyl-4-methylbenzene											
317	a-Methyl styrene		(1-Methyl ethenyl)benzene	118.2	0.91	166	3	40	0.9	0.8	1.9	1.9	0.9	445
	CAS 98-83-9	AMS	2-Phenyl propene	4.08 r		331 °F		104 °F	(44)	(39)	(94)	(94)	(44)	IIIB
	C <sub>6</sub> H <sub>5</sub> C(CH <sub>3</sub> )=CH <sub>2</sub>	C <sub>9</sub> H <sub>10</sub>	i-Propenyl benzene			1 ppm = 4.93 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.20 ppm			T2
			Isopropenyl benzene 1-Methyl-1-phenylethylene											

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
305	20 (85)	25 (106)	IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
306			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
307			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
308		200 (718)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (\$)	
			IR	Polytron 5700 type 334	100 %LEL (\$)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
309		200 (718)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (?)	
			IR	Polytron 5700 type 334	100 %LEL (?)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
310			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
311			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	40 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
312			IR	PIR 7000 type 334, P 8700 type 334	50 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	25 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
313	20 (83)		IR	PIR 7000 type 340, P 8700 type 340	10 / 10 %LEL (\$)	only for concentrations < 10 %LEL
314			EC	Polytron 7000 and P 8100 Hydrides	MMS: 5 / 20 / 20 ppm / LDL = 0.05 ppm	S = 0.55
			EC	Polytron 7000 and P 8100 Hydrides SC	MMS: 1 / 5 / 20 ppm / LDL = 0.05 ppm	S = 0.65
315	100 (493)	50 (246)	IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL (&)	
			IR	Polytron 5700 type 334	50 + 100 %LEL (&)	
			IR	PIR 7000 type 340, P 8700 type 340	50 / 100 %LEL (&)	
			IR	Polytron 5700 type 340	50 + 100 %LEL (&)	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
316	100 (493)	50 (246)	IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL (&)	
			IR	Polytron 5700 type 334	50 + 100 %LEL (&)	
			IR	PIR 7000 type 340, P 8700 type 340	50 / 100 %LEL (&)	
			IR	Polytron 5700 type 340	50 + 100 %LEL (&)	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
317	50 (246)	50 (246)	IR	PIR 7000 type 334, P 8700 type 334	40 / 100 %LEL // 3150 ppm Gas-Library	
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	45 / 100 %LEL // 3600 ppm Gas-Library	
			IR	Polytron 5700 type 340	100 %LEL Gas-Library	
			EC	Polytron 7000 and P 8100 OV1	as Aald (50 / 100 / 200 ppm)	S = 0.4 (L)

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
318	2-Methyltetrahydrofuran		Tetrahydro-2-methylfuran	86.1	0.85	80	136	-12	1.2*					
	CAS 96-47-9	2-MeTHF	Tetrahydrosilvan	2.97 r		176 °F		10 °F	(43)					
	(CH <sub>2</sub> ) <sub>3</sub> (O)CHCH <sub>3</sub>	C <sub>5</sub> H <sub>10</sub> O		76 v		1 ppm = 3.59 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.28 ppm				
319	Methyltrimethoxysilane		Trimethoxymethylsilane	136.2	0.96	102	106		1.5*					
	CAS 1185-55-3	MTMS		4.70 r		216 °F			(85)					
	CH <sub>3</sub> Si(OCH <sub>3</sub> ) <sub>3</sub>	C <sub>4</sub> H <sub>12</sub> O <sub>3</sub> Si				1 ppm = 5.68 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.18 ppm				
320	Morpholine		Tetrahydro-1.4-oxazine	87.1	1.00	129	10.7	31	1.8	1.4	1.4	1.4	1.8	275
	CAS 110-91-8		Diethylene oximide	3.01 r		264 °F		88 °F	(65)	(51)	(51)	(51)	(65)	IIA
	(CH <sub>2</sub> ) <sub>4</sub> ONH	C <sub>4</sub> H <sub>9</sub> NO				1 ppm = 3.63 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.28 ppm				T3
321	Naphthalene		Naphthyl hydride	128.2	1.14	218	0.07	77	0.6		0.9	0.9	0.9	540
	CAS 91-20-3			4.43 r		424 °F		171 °F	-32	(48)	(48)	(48)	(48)	IIA
	C <sub>10</sub> H <sub>8</sub>	C <sub>10</sub> H <sub>8</sub>				1 ppm = 5.34 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.19 ppm				T1
322	Nitric acid		Hydrogen nitrate	63.0	1.52	84	56	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 7697-37-2			2.17 r		183 °F								
	HNO <sub>3</sub>	HNO <sub>3</sub>				1 ppm = 2.63 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.38 ppm				
323	Nitroethane			75.1	1.05	115	20.8	28		3.4	3.4	3.4	3.4	410
	CAS 79-24-3			2.59 r		239 °F		82 °F		-106	-106	-106	-106	IIIB
	CH <sub>3</sub> CH <sub>2</sub> NO <sub>2</sub>	C <sub>2</sub> H <sub>5</sub> NO <sub>2</sub>				1 ppm = 3.13 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.32 ppm				T2
324	Nitrogen dioxide		Nitrogen peroxide	46.0	1.44	21	1000	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 10102-44-0	NTO	Nitrogen tetroxide	1.59 r		70 °F								
	NO <sub>2</sub>	NO <sub>2</sub>				1 ppm = 1.92 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.52 ppm				
325	Nitrogen monoxide		Nitric oxide	30.0	Gas	-152	Gas	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 10102-43-9			1.04 r		-242 °F								
	NO	NO				1 ppm = 1.25 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.80 ppm				
326	2-Nitropropane		Nitro-i-propane	89.1	0.99	120	17	26	2.2		2.6	2.6		425
	CAS 79-46-9	2-NP	Dimethylnitromethane	3.08 r		248 °F		79 °F	(82)		(97)	(97)		IIIB
	(CH <sub>3</sub> ) <sub>2</sub> CHNO <sub>2</sub>	C <sub>3</sub> H <sub>7</sub> NO <sub>2</sub>		124 v		1 ppm = 3.71 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.27 ppm				T2
327	n-Nonane			128.3	0.72	151	4.8	31	0.7	0.7	0.8	0.8	0.7	205
	CAS 111-84-2			4.43 r		304 °F		88 °F	(37)	(37)	(43)	(43)	(37)	IIA
	C <sub>9</sub> H <sub>20</sub>	C <sub>9</sub> H <sub>20</sub>				1 ppm = 5.35 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.19 ppm				T3
328	5-Nonanone		Nonan-5-on	142.2	0.82	188	0.4	65	0.8					330
	CAS 502-56-7		Dibutyl ketone	4.91 r		370 °F		149 °F	(47)					
	(C <sub>4</sub> H <sub>9</sub> ) <sub>2</sub> CO	C <sub>9</sub> H <sub>18</sub> O	Valerone			1 ppm = 5.93 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.17 ppm				T2
329	2.5-Norbornadiene		Norborna-2.5-diene	92.1	0.91	90	69	-11	1.0					350
	CAS 121-46-0	BCHD	Bicycloheptadiene	3.18 r		194 °F		12 °F	(38)					
	CH <sub>2</sub> ((CH=CH)CH) <sub>2</sub>	C <sub>7</sub> H <sub>8</sub>	Bicyclo(2.2.1)hepta-2.5-diene	63 v		1 ppm = 3.84 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.28 ppm				T2
330	1.7-Octadiene		Octa-1.7-diene	110.2	0.75	117	20		0.8					230
	CAS 3710-30-3			3.80 r		243 °F			(37)					IIIB
	H <sub>2</sub> C=CH(CH <sub>2</sub> ) <sub>4</sub> CH=CH <sub>2</sub>	C <sub>8</sub> H <sub>14</sub>		73 v		1 ppm = 4.59 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.22 ppm				T3

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
318			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
319			IR	PIR 7000 type 334, P 8700 type 334	15 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
320	10 (36)	20 (73)	IR	PIR 7000 type 334, P 8700 type 334	40 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			EC	Polytron 7000 and P 8100 NH3 LC	as NH3 x 4 (50 / 100 ppm x 4)	S = 0.25 (L)
321	0.1 (0.53)	10 (53)	IR	PIR 7000 type 334, P 8700 type 334	55 / 100 %LEL	
			IR	Polytron 5700 type 334	100 %LEL	
322	1 (2.6)	2 (5.3)	EC	Polytron 7000 and P 8100 AC	Acid: 3 / 10 / 30 ppm / LDL = 0.5 ppm	
323	100 (313)	100 (313)	IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	25 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
324	0.5 (0.96)	5c (9.6)	EC	Polytron 7000 and P 8100 NO2 LC	NO2: 1 / 5 / 20 ppm / LDL = 0.05 ppm	
			EC	Polytron 5100 NO2 LC	1 + 3 + 5 + 10 + 20 ppm	
325	2 (2.5)	25 (31)	EC	Polytron 7000 and P 8100 NO	NO: 30 / 50 / 200 ppm / LDL = 3 ppm	
			EC	Polytron 5100 NO	30 + 50 + 100 + 200 ppm	
			EC	Polytron 3000 NO	50 ppm	
326	0.5T (1.9)	25 (93)	IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (\$)	
			IR	Polytron 5700 type 334	100 %LEL (\$)	
327		200 (1069)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL // 1750 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	5 / 100 %LEL // 350 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL	performance approved
328			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
329			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (?)	
			IR	Polytron 5700 type 334	100 %LEL (?)	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
330			IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
331	Octamethyl cyclotetrasiloxane		DC244 Fluid	296.6	0.95	175	0.9	51	0.75*					400
	CAS 556-67-2	OMCTS		10.24 r		347 °F		124 °F	(93)					II B
	(CH <sub>3</sub> ) <sub>8</sub> Si <sub>4</sub> O <sub>4</sub>	C <sub>8</sub> H <sub>24</sub> O <sub>4</sub> Si <sub>4</sub>				1 ppm = 12.36 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.08 ppm				T2
332	Octamethyl trisiloxane			236.5	0.82	152	5		0.9*					
	CAS 107-51-7	OMTSO		8.16 r		306 °F			(89)					
	((CH <sub>3</sub> ) <sub>3</sub> SiO) <sub>2</sub> Si(CH <sub>3</sub> ) <sub>2</sub>	C <sub>8</sub> H <sub>24</sub> O <sub>2</sub> Si <sub>3</sub>				1 ppm = 9.85 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.10 ppm				
333	n-Octane			114.2	0.70	126	14	12	0.8	0.8	1.0	1.0	0.8	205
	CAS III-65-9			3.94 r		259 °F		54 °F	(38)	(38)	(48)	(48)	(38)	II A
	C <sub>8</sub> H <sub>18</sub>	C <sub>8</sub> H <sub>18</sub>		81 v		1 ppm = 4.76 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.21 ppm				T3
334	1-Octene		1-Octylene	112.2	0.71	121	23	21	0.7					240
	CAS III-66-0		1-Caprylene	3.87 r		250 °F		70 °F	(33)					
	CH <sub>2</sub> =CHC <sub>6</sub> H <sub>13</sub>	C <sub>8</sub> H <sub>16</sub>		69 v		1 ppm = 4.68 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.21 ppm				T3
335	Oxygen		R732	32.0	Gas	-183	Gas	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 7782-44-7			1.10 r		-297 °F								
	O <sub>2</sub>	O <sub>2</sub>				1 ppm = 1.33 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.75 ppm				
336	Ozone			48.0	Gas	-112	Gas	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 10028-15-6			1.66 r		-170 °F								
	O <sub>3</sub>	O <sub>3</sub>				1 ppm = 2.00 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.50 ppm				
337	Paraldehyde		Paracetaldehyde	132.2	0.99	124	10	27	1.3	1.3		1.3		235
	CAS 123-63-7	PCHO	2.4.6-Trimethyl-1.3.5-tri-oxane	4.56 r		255 °F		81 °F	(72)	(72)		(72)		II A
	(CH <sub>3</sub> CHO) <sub>3</sub>	C <sub>6</sub> H <sub>12</sub> O <sub>3</sub>	p-Acetyldehyde	108 v		1 ppm = 5.51 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.18 ppm				T3
338	1.3-Pentadiene trans		Penta-1.3-diene trans	68.1	0.67	42	452	< -30	1.2				1.2	
	CAS 2004-70-8		Piperylene	2.35 r		108 °F		< -22 °F	(34)				(34)	
	CH <sub>2</sub> =CHCH=CHCH <sub>3</sub>	C <sub>5</sub> H <sub>8</sub>	Piperylene trans	76 v		1 ppm = 2.84 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.35 ppm				
			(E)-1.3-Penadiene 1-Methylbutadiene trans											
339	1.1.1.3.3-Pentafluoro butane		HFC 365mfc	148.1	1.25	40	433	< -27	3.8					590
	CAS 406-58-6		R365	5.11 r		104 °F		< -17 °F	-234					
	CF <sub>3</sub> CH <sub>2</sub> CF <sub>2</sub> CH <sub>3</sub>	C <sub>4</sub> H <sub>9</sub> F <sub>5</sub>		281 v		1 ppm = 6.17 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.16 ppm				T1
340	Pentafluoropropane		1.1.1.3.3-Pentafluoropropane	134.1	Gas	15.3	Gas	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 460-73-1		R245fa	4.63 r		60 °F								
	CF <sub>3</sub> CH <sub>2</sub> CHF <sub>2</sub>	C <sub>3</sub> H <sub>3</sub> F <sub>5</sub>				1 ppm = 5.59 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.16 ppm				
341	2.2.4.6.6- Pentamethylheptane		i-Dodecane	170.3	0.75	180	1	43	0.5					430
	CAS 13475-82-6	iC12	Isododecane	5.88 r		356 °F		109 °F	(35)					II A
	((CH <sub>3</sub> ) <sub>3</sub> CCH <sub>2</sub> ) <sub>2</sub> CHCH <sub>3</sub>	C <sub>12</sub> H <sub>26</sub>				1 ppm = 7.10 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.14 ppm				T2
342	n-Pentane		Amyl hydride	72.2	0.63	36	562	< -20	1.1	1.1	1.5	1.5	1.4	260
	CAS 109-66-0			2.49 r		97 °F		< -4 °F	(33)	(33)	(45)	(45)	(42)	II A
	C <sub>5</sub> H <sub>12</sub>	C <sub>5</sub> H <sub>12</sub>		79 v		1 ppm = 3.01 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.23 ppm				T3

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
331			IR	PIR 7000 type 334, P 8700 type 334	40 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	35 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
332			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
333	500 (2379)	500 (2379)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL // 2000 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	5 / 100 %LEL // 400 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL	performance approved
334			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
335			EC	Polytron 7000 and P 8100 O2	5 / 25 / 100 vol% / LDL = 0.5 vol%	
			EC	Polytron 7000 and P 8100 O2 LS	5 / 10 / 25 vol% / LDL = 0.5 vol%	
			EC	Polytron 5100 O2	5 + 10 + 20 + 25 + 50 + 100 vol%	
			EC	Polytron 5100 O2 LS	5 + 10 + 20 + 25 vol%	
			EC	Polytron 3000 O2	5 or 25 or 100 vol%	
			EC	Polytron 3000 O2 LS	25 vol%	
			EC	Polytron 2000 O2	25 vol%	
336	0.1 (0.20)		EC	Polytron 7000 and P 8100 Ozone	O3: 0.5 / 1 / 5 ppm / LDL = 0.02 ppm	
			EC	Polytron 3000 Ozone	0.5 ppm	
337			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL (?)	
338			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	25 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
339			IR	PIR 7000 type 334, P 8700 type 334	45 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	90 / 100 %LEL (&)	
			IR	Polytron 5700 type 340	100 %LEL (&)	
340			IR	PIR 7000 type 334, P 8700 type 334	1.7 / 3.0 vol%	
			IR	Polytron 5700 type 334	2.0 vol%	
			IR	PIR 7000 type 340, P 8700 type 340	2.4 / 3.0 vol%	
341			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL // 1250 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL // 500 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
342	1000 (3008)	1000 (3008)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL // 2750 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL // 700 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL	performance approved
			OP	Polytron Pulsar 2	1 // 4 / 8 LELm	CSF = 0.79 (Propane = 1.00) / LEL = 1.1

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
343	Pentanoic acid		Valeric acid	102.1	0.94	186	0.2	87	1.6			1.6		375
	CAS 109-52-4		Butyl carbonic acid	3.52 r		367 °F		189 °F	-68			-68		IIA
	CH <sub>3</sub> (CH <sub>2</sub> ) <sub>3</sub> COOH	C <sub>5</sub> H <sub>10</sub> O <sub>2</sub>				1 ppm = 4.25 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.24 ppm				T2
344	3-Pentanol		Pentan-3-ol	88.2	0.82	116	7.6	30	1.2			1.2		360
	CAS 584-02-1		3-Amyl alcohol	3.04 r		241 °F		86 °F	(44)			(44)		IIA
	C <sub>2</sub> H <sub>5</sub> CH(OH)C <sub>2</sub> H <sub>5</sub>	C <sub>5</sub> H <sub>12</sub> O	Diethyl carbinol 1-Ethyl-1-propanol			1 ppm = 3.68 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.27 ppm				T2
345	1-Pentene		n-Amylene	70.1	0.64	30	704	<-20	1.4			1.5		280
	CAS 109-67-1		n-Pentylene	2.42 r		86 °F		<-4 °F	-41			(44)		
	C <sub>3</sub> H <sub>7</sub> CH=CH <sub>2</sub>	C <sub>5</sub> H <sub>10</sub>	Propylethylene			1 ppm = 2.92 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.34 ppm				T3
346	Phosgene		Carbonyl chloride	98.9	Gas	8	Gas	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 75-44-5	CG	Carbon oxychloride	3.41 r		46 °F								
	COCl <sub>2</sub>	CCl <sub>2</sub> O	Chloroformyl chloride			1 ppm = 4.12 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.24 ppm				
347	Phosphine		Hydrogen phosphide	34.0	Gas	-88	Gas		1.6			1.6		
	CAS 7803-51-2		Phosphorus hydride	1.17 r		-126 °F			-23			-23		
	PH <sub>3</sub>	H <sub>3</sub> P	Phosphorus trihydride			1 ppm = 1.42 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.71 ppm				
348	Phosphorus oxychloride		Phosphorus chloride	153.3	1.68	105	36	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 10025-87-3	POCL	Phosphorus oxytrichloride	5.29 r		221 °F								
	POCl <sub>3</sub>	Cl <sub>3</sub> OP	Phosphoryl chloride Trichlorophosphorus oxide Trichlorophosphine oxide			1 ppm = 6.39 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.16 ppm				
349	Phosphorus trichloride		Phosphorus chloride	137.3	1.57	76	127	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 7719-12-2		Trichlorophosphine	4.74 r		169 °F								
	PCl <sub>3</sub>	Cl <sub>3</sub> P				1 ppm = 5.72 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.17 ppm				
350	a-Pinene		2.6.6-Trimethylbicyclo (3.1.1)hept-2-ene	136.2	0.86	155	5	33	0.8*					255
	CAS 80-56-8		2-Pinene	4.70 r		311 °F		91 °F	(45)					
	C <sub>10</sub> H <sub>16</sub>	C <sub>10</sub> H <sub>16</sub>				1 ppm = 5.68 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.18 ppm				T3
351	Piperidine		Hexahydropyridine	85.2	0.86	106	33	4	1.3					
	CAS 110-89-4	PIP	Pentamethylene imine	2.94 r		223 °F		39 °F	(46)					
	(CH <sub>2</sub> ) <sub>5</sub> NH	C <sub>5</sub> H <sub>11</sub> N	Azacyclohexane	80 v		1 ppm = 3.55 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.28 ppm				
352	Propane		Dimethyl methane	44.1	Gas	-42	Gas	Gas	1.7	1.7	2.1	2.1	1.7	470
	CAS 74-98-6		Propyl hydride	1.52 r		-44 °F			-31	-31	(39)	(39)	-31	IIA
	C <sub>3</sub> H <sub>8</sub>	C <sub>3</sub> H <sub>8</sub>	R290			1 ppm = 1.84 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.54 ppm				T1
353	i-Propanol		Isopropanol	60.1	0.78	82	43	12	2.0	2.0	2.0	2.0	2.0	425
	CAS 67-63-0	IPA	i-Propyl alcohol	2.07 r		180 °F		54 °F	(50)	(50)	(50)	(50)	(50)	IIA
	(CH <sub>3</sub> ) <sub>2</sub> CHOH	C <sub>3</sub> H <sub>8</sub> O	Isopropyl alcohol 2-Propanol Propan-2-ol Dimethyl carbinol	96 v		1 ppm = 2.50 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.40 ppm				T2

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
343			IR	PIR 7000 type 334, P 8700 type 334	25 / 25 %LEL (&)	only for concentrations < 25 %LEL
			IR	PIR 7000 type 340, P 8700 type 340	25 / 25 %LEL (&)	only for concentrations < 25 %LEL
344	20 (74)		CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (\$)	
			IR	Polytron 5700 type 340	100 %LEL (\$)	
345			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL // 2800 ppm Gas-Library	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL // 1400 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (!)	
346	0.1 (0.41)	0.1 (0.41)	EC	Polytron 7000 and P 8100 COCl <sub>2</sub>	Phsg: 0.1 / 1 / 20 ppm / LDL = 0.05 ppm	
			EC	Polytron 5100 COCl <sub>2</sub>	0.1 + 0.3 + 0.5 + 1 + 3 + 5 + 10 + 20 ppm	
347	0.1 (0.14)	0.3 (0.43)	EC	Polytron 7000 and P 8100 PH <sub>3</sub> /AsH <sub>3</sub>	PH <sub>3</sub> : 0.3 / 1 / 20 ppm / LDL = 0.02 ppm	S = 1.0
			EC	Polytron 7000 and P 8100 Hydrides	PH <sub>3</sub> : 0.3 / 1 / 20 ppm / LDL = 0.03 ppm	S = 1.0
			EC	Polytron 7000 and P 8100 Hydrides SC	PH <sub>3</sub> : 0.3 / 1 / 1 ppm / LDL = 0.01 ppm	S = 1.0
			EC	Polytron 5100 Hydrides	PH <sub>3</sub> : 0.3 + 0.5 + 1 + 3 + 5 + 10 + 20 ppm	
			EC	Polytron 3000 PH <sub>3</sub>	0.3 or 1 or 10 ppm	
348	0.02 (0.13)	0.1 (0.64)	EC	Polytron 7000 and P 8100 AC	POC: 3 / 10 / 30 ppm / LDL = 0.5 ppm	
			EC	Polytron 7000 and P 8100 HCl	POC: 20 / 30 / 100 ppm / LDL = 1.5 ppm	S = 0.9
349	0.1 (0.57)	0.5 (2.9)	EC	Polytron 7000 and P 8100 AC	PCl <sub>3</sub> : 3 / 10 / 30 ppm / LDL = 0.5 ppm	
			EC	Polytron 7000 and P 8100 HCl	PCl <sub>3</sub> : 5 / 10 / 20 ppm / LDL = 0.2 ppm	S = 3.0
350			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
351			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
352	1000 (1837)	1000 (1837)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL // 3400 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	5 / 100 %LEL // 850 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL	performance approved
			IR	GasSecure GS01	100 %LEL	min. conc. for ultrasonic sensor: 1700 ppm
			OP	Polytron Pulsar 2	1 // 4 / 8 LELm	CSF = 1.00 (Propane = 1.00) / LEL = 1.7
353	200 (501)	400 (1002)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL // 4000 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL // 2000 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL	performance approved
			EC	Polytron 7000 and P 8100 OVI	IPA: 100 / 200 / 300 ppm / LDL = 10 ppm	S = 0.3

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
354	354 n-Propanol		n-Propyl alcohol	60.1	0.80	97	20	22	2.1	2.1	2.2	2.2	2.2	385
	CAS 71-23-8	NPA	1-Propanol	2.07 r		207 °F		72 °F	(53)	(53)	(55)	(55)	(55)	IIB
	C <sub>3</sub> H <sub>7</sub> OH	C <sub>3</sub> H <sub>8</sub> O	Ethyl carbinol	98 v		1 ppm = 2.50 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.40 ppm			T2
355	Propargyl alcohol		2-Propyn-1-ol	56.1	0.95	115	10	33	2.8	2.4			2.4	365
	CAS 107-19-7		Prop-2-yn-1-ol	1.94 r		239 °F		91 °F	(65)	(56)			(56)	IIB
	HCCCH <sub>2</sub> OH	C <sub>3</sub> H <sub>4</sub> O	Ethynyl carbinol 2-Propynyl alcohol			1 ppm = 2.34 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.43 ppm			T2
356	i-Propenyl acetate		1-Methylvinyl acetate	100.1	0.91	97	23	4	1.6					395
	CAS 108-22-5		1-Propen-2-ol acetate	3.46 r		207 °F		39 °F	(67)					IIA
	CH <sub>3</sub> COOC(CH <sub>3</sub> )=CH <sub>2</sub>	C <sub>5</sub> H <sub>8</sub> O <sub>2</sub>	Acetic acid i-propenyl ester Isopropenyl acetate	110 v		1 ppm = 4.17 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.24 ppm			T2
357	Propionaldehyde		Propionic aldehyde	58.1	0.80	49	341	<-20	2.3	2.0		2.6	2.0	190
	CAS 123-38-6		Propanal	2.01 r		120 °F		<-4 °F	(56)	(48)		(63)	(48)	IIB
	C <sub>2</sub> H <sub>5</sub> CHO	C <sub>3</sub> H <sub>6</sub> O	Propyl aldehyde Methylacetaldehyde	104 v		1 ppm = 2.42 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.41 ppm			T4
358	Propionic acid		Propanoic acid	74.1	0.99	141	3.5	52	2.9	2.1		2.9	3.1	485
	CAS 79-09-4		Methylacetic acid	2.56 r		286 °F		126 °F	(90)	(65)		(90)	(96)	IIA
	C <sub>2</sub> H <sub>5</sub> COOH	C <sub>3</sub> H <sub>6</sub> O <sub>2</sub>	Carboxyethane Ethylformic acid Ethanecarboxylic acid			1 ppm = 3.09 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.32 ppm			T1
359	Propionic acid anhydride		Propionic anhydride	130.1	1.02	167	1.4	74				1.3		315
	CAS 123-62-6		Propanoic acid anhydride	4.49 r		333 °F		165 °F				-70		
	(C <sub>2</sub> H <sub>5</sub> CO) <sub>2</sub> O	C <sub>6</sub> H <sub>10</sub> O <sub>3</sub>	Propanoic anhydride Methylacetic anhydride			1 ppm = 5.42 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.28 ppm			T2
360	2-Propoxyethanol		Ethylene glycol monopropyl ether	104.2	0.91	150	1.7	51	1.45					230
	CAS 2807-30-9	EGnPE	Propylglycol	3.60 r		302 °F		124 °F	(63)					IIB
	C <sub>3</sub> H <sub>7</sub> OCH <sub>2</sub> CH <sub>2</sub> OH	C <sub>5</sub> H <sub>12</sub> O <sub>2</sub>	Propyl cellosolve			1 ppm = 4.34 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.23 ppm			T3
361	i-Propoxyethanol		Ethylene glycol i-propyl ether	104.2	0.90	142	3.5	43	1.4					
	CAS 109-59-1	EGiPE	i-Propyl glycol	3.60 r		288 °F		109 °F	(61)					IIB
	(CH <sub>3</sub> ) <sub>2</sub> CHOC <sub>2</sub> H <sub>4</sub> OH	C <sub>5</sub> H <sub>12</sub> O <sub>2</sub>	Isopropoxyethanol Isopropyl glycol Isopropyl oxitol 4-Methyl-3-oxa-1-pentanol			1 ppm = 4.34 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.23 ppm			
362	1-Propoxy-2-propanol		1-Propoxypropan-2-ol	118.2	0.89	150	2.27	48	1.2					
	CAS 1569-01-3	PnPGE	Propylene glycol propyl ether	4.08 r		302 °F		118 °F	-59					
	C <sub>5</sub> H <sub>7</sub> OCH <sub>2</sub> CH(OH)CH <sub>3</sub>	C <sub>6</sub> H <sub>14</sub> O <sub>2</sub>	2-Propoxy-1-methyl ethanol			1 ppm = 4.93 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.20 ppm			
363	i-Propyl acetate		Isopropyl acetate	102.1	0.88	89	62	2	1.8	1.7	1.8	1.8	1.8	425
	CAS 108-21-4		Acetic acid i-propyl ester	3.52 r		192 °F		36 °F	(77)	(72)	(77)	(77)	(77)	IIA
	CH <sub>3</sub> COOCH(CH <sub>3</sub> ) <sub>2</sub>	C <sub>5</sub> H <sub>10</sub> O <sub>2</sub>	Acetic acid 1-methylethyl ester 2-Acetoxyp propane 2-Propyl acetate			1 ppm = 4.25 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.24 ppm			T2
364	n-Propyl acetate		Acetic acid propyl ester	102.1	0.89	102	33	10	1.7	1.7	1.7	1.7	1.7	455
	CAS 109-60-4		Ethanoic acid propyl ester	3.52 r		216 °F		50 °F	(72)	(72)	(72)	(72)	(72)	IIA
	CH <sub>3</sub> COOC <sub>3</sub> H <sub>7</sub>	C <sub>5</sub> H <sub>10</sub> O <sub>2</sub>	1-Acetoxyp propane			1 ppm = 4.25 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.24 ppm			T1

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
354		200 (501)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	15 / 100 %LEL // 3150 ppm Gas-Library	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	5 / 100 %LEL // 1050 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			EC	Polytron 7000 and P 8100 OV1	as EtOH (100 / 200 / 300 ppm)	S = 0.85 (L)
355	2 (4.7)	1 (2.3)	CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL (?)	
356	10 (42)		IR	PIR 7000 type 334, P 8700 type 334	50 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	45 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
357			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL // 6900 ppm Gas-Library	
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL // 3450 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
358	10 (31)	10 (31)	IR	PIR 7000 type 334, P 8700 type 334	15 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (\$)	
359			IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	35 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
360	20 (87)		IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	5 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
361	5 (22)		IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
362			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
363	250 (1064)		CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
364	200 (851)		CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
365	i-Propylamine		2-Aminopropane	59.1	0.69	32	633	< -20	2.0	2.3		2.3	2.3	400
	CAS 75-31-0		2-Propylamine	2.04 r		90 °F		< -4 °F	(49)	(57)		(57)	(57)	IIA
	(CH <sub>3</sub> ) <sub>2</sub> CHNH <sub>2</sub>	C <sub>3</sub> H <sub>9</sub> N	2-Propanamine	107 v		1 ppm = 2.46 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.41 ppm				T2
			Isopropylamine											
366	n-Propylamine		1-Aminopropane	59.1	0.72	49	339	< -20	2.0	2.0		2.0	2.0	320
	CAS 107-10-8		1-Propylamine	2.04 r		120 °F		< -4 °F	(49)	(49)		(49)	(49)	IIA
	C <sub>3</sub> H <sub>7</sub> NH <sub>2</sub>	C <sub>3</sub> H <sub>9</sub> N	1-Propanamine	102 v		1 ppm = 2.46 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.41 ppm				T2
367	n-Propylbenzene		1-Phenylpropane	120.2	0.86	159	3.5	39	0.8			0.8		450
	CAS 103-65-1			4.15 r		318 °F		102 °F	(40)			(40)		IIA
	C <sub>6</sub> H <sub>5</sub> C <sub>3</sub> H <sub>7</sub>	C <sub>9</sub> H <sub>12</sub>				1 ppm = 5.01 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.20 ppm				T2
368	i-Propyl chloride		2-Chloropropane	78.5	0.86	35	567	< -20	2.8	2.8		2.8	2.8	590
	CAS 75-29-6	IPC	Isopropyl chloride	2.71 r		95 °F		< -4 °F	-92	-92		-92	-92	IIA
	(CH <sub>3</sub> ) <sub>2</sub> CHCl	C <sub>3</sub> H <sub>7</sub> Cl		159 v		1 ppm = 3.27 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.31 ppm				T1
369	n-Propylchloride		1-Chloropropane	78.5	0.89	47	373	< -20	2.6	2.4		2.6	2.4	520
	CAS 540-54-5		R280	2.71 r		117 °F		< -4 °F	(85)	(79)		(85)	(79)	IIA
	C <sub>3</sub> H <sub>7</sub> Cl	C <sub>3</sub> H <sub>7</sub> Cl		143 v		1 ppm = 3.27 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.31 ppm				T1
370	i-Propylcyclohexane		Isopropylcyclohexane	126.4	0.80	155								
	CAS 696-29-7		2-Cyclohexylpropane	4.36 r		311 °F								
	C <sub>6</sub> H <sub>11</sub> CH(CH <sub>3</sub> ) <sub>2</sub>	C <sub>9</sub> H <sub>18</sub>	(Methylethyl)cyclohexane			1 ppm = 5.27 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.19 ppm				
			Hexahydrocumene											
371	Propylene		Propene	42.1	Gas	-48	Gas	Gas	2.0	2.0		2.0	2.0	485
	CAS 115-07-1		Methylethylene	1.45 r		-54 °F			(35)	(35)		(35)	(35)	IIA
	CH <sub>2</sub> =CHCH <sub>3</sub>	C <sub>3</sub> H <sub>6</sub>	Methylethene			1 ppm = 1.75 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.57 ppm				
			R1270											
372	1,2-Propylenediamine		1,2-Diaminopropane	74.1	0.87	119	4	33	2.2*					
	CAS 78-90-0	PDA	Propane-1,2-diamine	2.56 r		246 °F		91 °F	-68					
	CH <sub>3</sub> CH(NH <sub>2</sub> )CH <sub>2</sub> NH <sub>2</sub>	C <sub>3</sub> H <sub>10</sub> N <sub>2</sub>				1 ppm = 3.09 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.32 ppm				
373	Propylene oxide		1,2-Epoxy propane	58.1	0.83	34	588	< -20	1.9	1.9	2.3	2.3	1.9	430
	CAS 75-56-9	PO	1,2-Propene oxide	2.01 r		93 °F		< -4 °F	(46)	(46)	(56)	(56)	(46)	IIIB
	CH <sub>3</sub> CHCH <sub>2</sub> O	C <sub>3</sub> H <sub>6</sub> O	Methyloxirane	83 v		1 ppm = 2.42 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.41 ppm				
			Methyl ethylene oxide											
374	n-Propylformate		Formic acid propylester	88.1	0.91	81	84	-3	2.2					360
	CAS 110-74-7		Methanoic acid propylester	3.04 r		178 °F		27 °F	(81)					IIA
	HCOOC <sub>3</sub> H <sub>7</sub>	C <sub>9</sub> H <sub>12</sub>		133 v		1 ppm = 3.67 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.27 ppm				T2
375	i-Propyl mercaptan		2-Propanethiol	76.2	0.82	53	300	-20	1.8					
	CAS 75-33-2	iPM	2-Propyl mercaptan	2.63 r		127 °F		-4 °F	(57)					
	(CH <sub>3</sub> ) <sub>2</sub> CHSH	C <sub>3</sub> H <sub>8</sub> S	Isopropyl mercaptan	104 v		1 ppm = 3.18 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.31 ppm				

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
365	5 (12)	5 (12)	CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			EC	Polytron 7000 and P 8100 NH3 LC	i-PA: 100 / 200 ppm / LDL = 10 ppm	
366			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
367			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL // 2000 ppm Gas-Library	
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL // 1200 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
368			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison
			IR	PIR 7000 type 334, P 8700 type 334	15 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
369			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
370			IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
371			CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD performance approved performance approved performance approved performance approved performance approved min. conc. for ultrasonic sensor: 2000 ppm S = 0.7 CSF = 0.83 (Propane = 1.00) / LEL = 2.0
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL // 4000 ppm Gas-Library	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL // 3000 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			IR	GasSecure GS01	100 %LEL	
			EC	Polytron 7000 and P 8100 OVI	C3H6: 30 / 50 / 100 ppm / LDL = 5 ppm	
372			OP	Polytron Pulsar 2	1 // 4 / 8 LELm	
			IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
373	2 (4.8)	100 (242)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD performance approved performance approved performance approved performance approved S = 0.8
			IR	PIR 7000 type 334, P 8700 type 334	15 / 100 %LEL // 2850 ppm Gas-Library	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL // 2850 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			EC	Polytron 7000 and P 8100 OVI	PO: 20 / 50 / 200 ppm / LDL = 5 ppm	
374			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
375			EC	Polytron 7000 and P 8100 H2S LC	iPM: 20 / 50 / 100 ppm / LDL = 1 ppm	S = 0.5

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
376	n-Propyl mercaptan		1-Propanethiol	76.2	0.84	68	165	-15	1.8					
	CAS 107-03-9	nPM	1-Propyl mercaptan	2.63 r		154 °F		5 °F	(57)					IIA
	C <sub>3</sub> H <sub>7</sub> SH	C <sub>3</sub> H <sub>8</sub> S	1-Mercaptopropane	102 v		1 ppm = 3.18 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.31 ppm				
377	i-Propyl nitrate		Nitric acid i-propylester	105.1	1.04	101	36	11		2.0			2.0	175
	CAS 1712-64-7		Nitric acid 1-methylethylester	3.63 r		214 °F		52 °F		(88)			(88)	II B
	(CH <sub>3</sub> ) <sub>2</sub> CHONO <sub>2</sub>	C <sub>3</sub> H <sub>7</sub> NO <sub>3</sub>	Isopropyl nitrate			1 ppm = 4.38 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.23 ppm				T4
378	Propyne		Methyl acetylene	40.1	Gas	-23	Gas		1.8	1.7	1.7	1.7	1.7	340
	CAS 74-99-7		Allylene	1.38 r		-9 °F			-30	(28)	(28)	(28)	(28)	II B
	CH <sub>3</sub> CCH	C <sub>3</sub> H <sub>4</sub>	1-Propyne	86 v		1 ppm = 1.67 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.60 ppm				T2
			Propine											
379	Pyridine		Azine	79.1	0.98	115	20	17	1.7	1.7	1.8	1.8	1.7	550
	CAS 110-86-1		Azabenzene	2.73 r		239 °F		63 °F	(56)	(56)	-59	-59	(56)	IIA
	C <sub>5</sub> H <sub>5</sub> N	C <sub>5</sub> H <sub>5</sub> N				1 ppm = 3.30 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.30 ppm				T1
380	Silane		Monosilane	32.1	Gas	-112	Gas						1.4	
	CAS 7803-62-5		Silicon tetrahydride	1.11 r		-170 °F							-19	
	SiH <sub>4</sub>	H <sub>4</sub> Si	Silicane			1 ppm = 1.34 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.75 ppm				
			Silicon hydride											
381	Silicon tetrachloride		Tetrachlorosilane	169.9	1.48	57	260	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 10026-04-7			5.86 r		135 °F								
	SiCl <sub>4</sub>	Cl <sub>4</sub> Si				1 ppm = 7.08 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.14 ppm				
382	Silicon tetrafluoride		Tetrafluorosilane	104.1	Gas	-65	Gas	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 7783-61-1			3.59 r		-85 °F								
	SiF <sub>4</sub>	F <sub>4</sub> Si				1 ppm = 4.34 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.23 ppm				
383	Styrene		Styrol	104.2	0.91	145	7	32	1.0	1.0	0.9	0.9	1.1	490
	CAS 100-42-5		Vinyl benzene	3.60 r		293 °F		90 °F	(43)	(43)	(39)	(39)	(48)	IIA
	C <sub>6</sub> H <sub>5</sub> CH=CH <sub>2</sub>	C <sub>8</sub> H <sub>8</sub>	Ethenyl benzene			1 ppm = 4.34 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.23 ppm				T1
			Phenylethylene											
			Cinnamene											
384	Sulfur dioxide		Sulfurous oxide	64.1	Gas	-10	Gas	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 7446-09-5		R764	2.21 r		14 °F								
	SO <sub>2</sub>	O <sub>2</sub> S				1 ppm = 2.67 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.37 ppm				
385	Terpineol		2(4-Methylcyclohex-3-ene-1-yl)propan-2-ol	154.3	0.93	215	0.24		0.53*					
	CAS 8000-41-7		4-Menth-1-ene-8-ol	5.33 r		419 °F			(34)					
	(CH <sub>3</sub> ) <sub>2</sub> C(OH)C <sub>6</sub> H <sub>8</sub> CH <sub>3</sub>	C <sub>10</sub> H <sub>18</sub> O	1-Methyl-4-isopropyl-1-cyclohexene-8-ol			1 ppm = 6.43 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.16 ppm				
386	Tetraethyl orthosilicate		Tetraethoxysilane	208.3	0.93	169	9.2	37	0.8	0.45		1.3	230	
	CAS 78-10-4	TEOS	Silicic acid tetraethylester	7.19 r		336 °F		99 °F	-69	(39)		(113)	II B	
	(C <sub>2</sub> H <sub>5</sub> O) <sub>4</sub> Si	C <sub>8</sub> H <sub>20</sub> O <sub>4</sub> Si	Tetraethyl silicate			1 ppm = 8.68 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.12 ppm			T3	
			Ethyl silicate											
			Ethyl orthosilicate											
387	1,1,1,2-Tetrafluoroethane		Norflurane	102.0	Gas	-26	Gas	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 811-97-2		R134a	3.52 r		-15 °F								
	CF <sub>3</sub> CH <sub>2</sub> F	C <sub>2</sub> H <sub>2</sub> F <sub>4</sub>				1 ppm = 4.25 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.24 ppm				
388	1,3,3,3-Tetrafluoroprop-1-ene trans		HFO-1234ze	114.0	Gas	-19	Gas		6.2*					
	CAS 1645-83-6		HFC-1234ze	3.94 r		-2 °F			-295					
	CF <sub>3</sub> CH=CHF	C <sub>3</sub> H <sub>2</sub> F <sub>4</sub>	R1234ze			1 ppm = 4.75 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.21 ppm				
389	Tetrahydrobenzaldehyde		1,2,3,6-Tetrahydrobenzaldehyde	110.2	0.97	164	2.1	47	1.1*					
	CAS 100-50-5	THB	3-Cyclohexene-1-aldehyde	3.80 r		327 °F		117 °F	(51)					
	C <sub>6</sub> H <sub>8</sub> CHO	C <sub>7</sub> H <sub>10</sub> O	3-Cyclohexene-1-carbaldehyde			1 ppm = 4.59 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.22 ppm				
			4-Formyl-1-cyclohexene											
390	Tetrahydrofuran		Diethylene monoxide	72.1	0.89	64	173	-20	1.5	1.5	2.0	2.0	1.5	230
	CAS 109-99-9	THF	Tetramethylene oxide	2.49 r		147 °F		-4 °F	(45)	(45)	(60)	(60)	(45)	II B
	(CH <sub>2</sub> ) <sub>4</sub> O	C <sub>4</sub> H <sub>8</sub> O	1,4-Epoxybutane	76 v		1 ppm = 3.00 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.33 ppm				T3

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
376		0.5c (1.6)	EC	Polytron 7000 and P 8100 H2S LC	nPM: 20 / 50 / 100 ppm / LDL = 1 ppm	S = 0.3
377			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
378		1000 (1671)	CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
379		5 (16)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
380		5 (6.7)	EC	Polytron 7000 and P 8100 Hydrides	SiH4: 5 / 5 / 50 ppm / LDL = 0.05 ppm	S = 0.95
			EC	Polytron 7000 and P 8100 Hydrides SC	SiH4: 1 / 5 / 20 ppm / LDL = 0.05 ppm	S = 0.65
			EC	Polytron 3000 PH3	0.3 or 1 or 10 ppm	
381			EC	Polytron 7000 and P 8100 AC	TeCS: 3 / 10 / 30 ppm / LDL = 0.5 ppm	
			EC	Polytron 7000 and P 8100 HCl	TeCS: 5 / 10 / 20 ppm / LDL = 0.2 ppm	S = 5.0
			EC	Polytron 3000 AC	3 or 10 ppm	
382			EC	Polytron 7000 and P 8100 AC	SiF4: 3 / 10 / 30 ppm / LDL = 0.5 ppm	
			EC	Polytron 3000 AC	3 or 10 ppm	
383	20 (87)	100 (434)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	polymerizing/sensor poison
			IR	PIR 7000 type 334, P 8700 type 334	40 / 100 %LEL // 3500 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			EC	Polytron 7000 and P 8100 OV2	Styr: 20 / 50 / 100 ppm / LDL = 5 ppm	S = 0.5
384	1 (2.7)	5 (13)	EC	Polytron 7000 and P 8100 SO2	SO2: 5 / 10 / 100 ppm / LDL = 0.5 ppm	
			EC	Polytron 5100 SO2	5 + 10 + 20 + 30 + 50 + 100 ppm	
			EC	Polytron 3000 SO2	10 ppm	
385			IR	PIR 7000 type 334, P 8700 type 334	70 / 100 %LEL	
			IR	Polytron 5700 type 334	100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
386	1.4 (12)	100 (868)	IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
387	1000 (4250)		IR	PIR 7000 type 334, P 8700 type 334	1.5 / 10.0 vol% // 15000 ppm Gas-Library	
			IR	Polytron 5700 type 334	2.0 + 5.0 + 10.0 vol% Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	2.0 / 10.0 vol% // 20000 ppm Gas-Library	
			IR	Polytron 5700 type 340	2.0 + 5.0 + 10.0 vol% Gas-Library	
388			IR	PIR 7000 type 334, P 8700 type 334	100 / 100 %LEL (&)	
			IR	Polytron 5700 type 334	100 %LEL (&)	
389			IR	PIR 7000 type 334, P 8700 type 334	60 / 100 %LEL	
			IR	Polytron 5700 type 334	100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	25 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
390	50 (150)	200 (601)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	15 / 100 %LEL // 2250 ppm Gas-Library	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	5 / 100 %LEL // 750 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			EC	Polytron 7000 and P 8100 OV1	THF: 30 / 50 / 200 ppm / LDL = 5 ppm	S = 0.75

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
391	Tetrahydronaphthalene		1.2.3.4- Tetrahydronaphthalene	132.2	0.97	208	0.24	71	0.8			0.8		390
	CAS 119-64-2		Tetralin	4.56 r		406 °F		160 °F	(44)			(44)		
	C <sub>10</sub> H <sub>12</sub>	C <sub>10</sub> H <sub>12</sub>												T2
392	Tetrahydropyran		Tetrahydro-2H-pyran	86.1	0.88	88	95.3	-20	1.1*					
	CAS 142-68-7	THP	Pentamethylene oxide	2.97 r		190 °F		-4 °F	(39)					
	(CH <sub>2</sub> ) <sub>5</sub> O	C <sub>5</sub> H <sub>10</sub> O	Oxacyclohexane											1 mg/m <sup>3</sup> = 0.28 ppm
			Oxane											
393	Tetrahydrothiophene		Tetramethylene sulfide	88.2	1.00	121	19	13	1.1	1.1			1.1	200
	CAS 110-01-0	THT	Thiocyclopentane	3.04 r		250 °F		55 °F	(40)	(40)			(40)	IIA
	C <sub>4</sub> H <sub>8</sub> S	C <sub>4</sub> H <sub>8</sub> S	Thiophane	61 v										T4
394	Tetrakisdimethylamin- otitanium		Titanium tetrakis (dimethylammonium)	224.2	0.95	n. a.	0.1		0.15*					
	CAS 3275-24-9	TDMAT	Titanium dimethylamide	7.74 r		32 °F			(14)					
	((CH <sub>3</sub> ) <sub>2</sub> N) <sub>4</sub> Ti	C <sub>8</sub> H <sub>24</sub> N <sub>4</sub> Ti												1 mg/m <sup>3</sup> = 0.11 ppm
395	1.2.3.5- Tetramethylbenzene		1.3.4.5-Tetramethylbenzene	134.2	0.89	198			0.7**					
	CAS 527-53-7	TeMB	Isodurene	4.63 r		388 °F			(39)					
	C <sub>6</sub> H <sub>2</sub> (CH <sub>3</sub> ) <sub>4</sub>	C <sub>10</sub> H <sub>14</sub>												1 mg/m <sup>3</sup> = 0.18 ppm
396	1.1.3.3- Tetramethyldisiloxane		2.4-Dimethyl-3-oxa-2.4- disilapentane	134.3	0.76	71	150	<-20	0.8*					240
	CAS 3277-26-7	TMDSO		4.64 r		160 °F		<-4 °F	(45)					IIIB
	(CH <sub>3</sub> SiHCH <sub>3</sub> ) <sub>2</sub> O	C <sub>4</sub> H <sub>14</sub> OSi <sub>2</sub>												T3
397	1.1.3.3- Tetramethyldivinyl disilazane		1.1.3.3-Tetramethyl-1.3- divinyldisilazane	185.4	0.82	160	14		0.8*					
	CAS 7691-02-3	DVTMDS	1.3-Divinyltetramethyld- isilazane	6.40 r		320 °F			(62)					
	(CH <sub>2</sub> =CH-Si(CH <sub>3</sub> ) <sub>2</sub> ) <sub>2</sub> NH	C <sub>8</sub> H <sub>19</sub> NSi <sub>2</sub>	1.3-Divinyl-1.1.3.3- tetramethyldisilazane											1 mg/m <sup>3</sup> = 0.13 ppm
398	1.2- Bis-(dimethyl amino)-ethane		1.2-Bis-(dimethyl amino)-ethane	116.2	0.77	120	13.3	19	1.0					145
	CAS 110-18-9	TEMED		4.01 r		248 °F		66 °F	(48)					IIA
	(CH <sub>3</sub> ) <sub>2</sub> NC <sub>2</sub> H <sub>4</sub> N(CH <sub>3</sub> ) <sub>2</sub>	C <sub>6</sub> H <sub>16</sub> N <sub>2</sub>		94 v										T4
399	1.2- Bis-(dimethyl amino)-ethane		1.2-Bis-(dimethyl amino)-ethane	116.2	0.77	120	13.3	19	1.0					145
	CAS 681-84-5	TMOS	Silicic acid tetramethylester	5.25 r		252 °F		68 °F	(56)					
	(CH <sub>3</sub> O) <sub>4</sub> Si	C <sub>4</sub> H <sub>12</sub> O <sub>4</sub> Si	Tetramethyl silicate											1 mg/m <sup>3</sup> = 0.16 ppm
			Methyl silicate											
			Methyl orthosilicate											
400	2.2.3.3- Tetramethylpentane		i-Nonane	128.3	0.76	140		25	0.8					430
	CAS 7154-79-2		Isononane	4.43 r		284 °F		77 °F	(43)					IIA
	C <sub>7</sub> H <sub>2</sub> C(CH <sub>3</sub> ) <sub>2</sub> C(CH <sub>3</sub> ) <sub>3</sub>	C <sub>9</sub> H <sub>20</sub>		84 v										T2
401	2.2.3.3- Tetramethylpentane		i-Nonane	128.3	0.76	140		25	0.8					430
	CAS 75-76-3	TMS	Tetramethyl silicane	88.2	0.65	26	750	<-20	1.0					330
	(CH <sub>3</sub> ) <sub>4</sub> Si	C <sub>4</sub> H <sub>12</sub> Si		3.04 r		79 °F		<-4 °F	(37)					IIIB
				85 v										T2
402	1.3-Divinyl-1.1.3.3- tetramethyldisilazane		1.3-Divinyl-1.1.3.3- tetramethyldisilazane	185.4	0.82	160	14		0.8*					
	CAS 7719-09-7		Sulfurous oxychloride	119.0	1.64	76	124	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	SOCl <sub>2</sub>	Cl <sub>2</sub> OS	Sulfurous dichloride	4.11 r		169 °F								
														1 mg/m <sup>3</sup> = 4.96 mg/m <sup>3</sup>
														1 mg/m <sup>3</sup> = 0.20 ppm
403	1.3-Divinyl-1.1.3.3- tetramethyldisilazane		1.3-Divinyl-1.1.3.3- tetramethyldisilazane	185.4	0.82	160	14		0.8*					
	CAS 7646-78-8		Tin chloride	260.5	2.23	114	24	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	SnCl <sub>4</sub>	Cl <sub>4</sub> Sn	Stannic chloride	8.99 r		237 °F								
														1 mg/m <sup>3</sup> = 10.85 mg/m <sup>3</sup>
														1 mg/m <sup>3</sup> = 0.09 ppm
404	1.3-Divinyl-1.1.3.3- tetramethyldisilazane		1.3-Divinyl-1.1.3.3- tetramethyldisilazane	185.4	0.82	160	14		0.8*					
	CAS 7550-45-0		Titanic chloride	189.7	1.73	136	13	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	TiCl <sub>4</sub>	Cl <sub>4</sub> Ti		6.55 r		277 °F								
														1 mg/m <sup>3</sup> = 7.90 mg/m <sup>3</sup>
														1 mg/m <sup>3</sup> = 0.13 ppm
405	1.1.3.3- Tetramethyldisiloxane		2.4-Dimethyl-3-oxa-2.4- disilapentane	134.3	0.76	71	150	<-20	0.8*					240
	CAS 108-88-3		Methyl benzene	92.1	0.87	111	29	6	1.0	1.0	1.1	1.1	1.1	535
	C <sub>6</sub> H <sub>5</sub> CH <sub>3</sub>	C <sub>7</sub> H <sub>8</sub>	Methyl benzol	3.18 r		232 °F		43 °F	(38)	(38)	(42)	(42)	(42)	IIA
			Phenyl methane	66 v										T1
														1 mg/m <sup>3</sup> = 3.84 mg/m <sup>3</sup>
														1 mg/m <sup>3</sup> = 0.26 ppm

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
391			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
392			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
393	50 (184)		IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
		EC	Polytron 7000 and P 8100 H2S LC	THT: 20 / 50 / 100 ppm / LDL = 1 ppm	S = 0.3	
394			EC	Polytron 7000 and P 8100 NH3 LC	TDMATI: 100 ppm / LDL = 5 ppm	
395			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
396			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
			EC	Polytron 7000 and P 8100 OVI	as IPA (100 / 200 / 300 ppm)	S = 0.4 (L)
397			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	25 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
398			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
399	0.3 (1.9)	1 (6.3)	IR	PIR 7000 type 334, P 8700 type 334	15 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
400			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
401			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
402		1c (5.0)	EC	Polytron 7000 and P 8100 AC	Acid: 3 / 10 / 30 ppm / LDL = 0.5 ppm	
			EC	Polytron 7000 and P 8100 HCl	SOC: 5 / 10 / 20 ppm / LDL = 0.2 ppm	S = 4.0
403			EC	Polytron 7000 and P 8100 AC	Acid: 3 / 10 / 30 ppm / LDL = 0.5 ppm	
			EC	Polytron 7000 and P 8100 HCl	TTC: 5 / 10 / 20 ppm / LDL = 0.5 ppm	S = 3.0
404			EC	Polytron 7000 and P 8100 AC	Acid: 3 / 10 / 30 ppm / LDL = 0.5 ppm	
			EC	Polytron 7000 and P 8100 HCl	TiTC: 5 / 10 / 20 ppm / LDL = 0.2 ppm	S = 5.0
405	50 (192)	200 (768)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD
			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL // 2750 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	40 / 100 %LEL // 4000 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL	performance approved

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
406	Tributylamine		N,N-Dibutyl-1-butanamine	185.4	0.78	214	0.4	86	1.4*	7.5	7.5			
	CAS 102-82-9	TBA		6.40 r		417 °F		187 °F	-108	(417)	(417)			IIA
	(C <sub>4</sub> H <sub>9</sub> ) <sub>3</sub> N	C <sub>12</sub> H <sub>27</sub> N				1 ppm = 7.73 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.13 ppm				
407	1,1,1-Trichloroethane		Methyl chloroform	133.4	1.34	74	133	n. a.	9.5		7.5	7.5		490
	CAS 71-55-6		RI40a	4.60 r		165 °F			(528)		(417)	(417)		IIA
	CH <sub>3</sub> CCl <sub>3</sub>	C <sub>2</sub> H <sub>3</sub> Cl <sub>3</sub>		590 v		1 ppm = 5.56 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.18 ppm				T1
408	Trichloro ethene		Trichloro ethylene	131.4	1.46	87	77.6		7.9		8.0			410
	CAS 79-01-6	TCE	1,1,2-Trichloroethylene	4.54 r		189 °F			-433		-438			IIA
	Cl <sub>2</sub> C=CHCl	C <sub>2</sub> HCl <sub>3</sub>	Ethylene trichloride	444 v		1 ppm = 5.48 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.18 ppm				T2
409	1,2,3-Trichloropropane		Trichlorohydrin	147.4	1.39	156	2.8	74	3.2		3.2	3.2		
	CAS 96-18-4		Allyl trichloride	5.09 r		313 °F		165 °F	(197)		(197)	(197)		IIA
	C <sub>3</sub> H <sub>5</sub> Cl <sub>3</sub>	C <sub>3</sub> H <sub>5</sub> Cl <sub>3</sub>	Glyceril trichlorohydrin			1 ppm = 6.14 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.16 ppm				
410	Trichlorosilane		Silyl trichloride	135.5	1.34	32	660	<-20	6.9			1.2		195
	CAS 10025-78-2	TCS	Silicochloroform	4.68 r		90 °F		<-4 °F	(390)			-68		IIC
	SiHCl <sub>3</sub>	HCl <sub>3</sub> Si	Silicon chloroform	435 v		1 ppm = 5.65 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.18 ppm				T4
411	Triethoxymethane		Triethyl orthoformate	148.2	0.90	146	4	30	0.7					
	CAS 122-51-0	TEOF	Formic acid-o-triethyl ester	5.12 r		295 °F		86 °F	(43)					
	CH(OC <sub>2</sub> H <sub>5</sub> ) <sub>3</sub>	C <sub>7</sub> H <sub>16</sub> O <sub>3</sub>		72 v		1 ppm = 6.18 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.16 ppm				
412	Triethylamine		N,N-Diethylethanamine	101.2	0.73	89	70	-7	1.2	1.2	1.2	1.2	1.2	215
	CAS 121-44-8	TEA		3.49 r		192 °F		19 °F	(51)	(51)	(51)	(51)	(51)	IIA
	(C <sub>2</sub> H <sub>5</sub> ) <sub>3</sub> N	C <sub>6</sub> H <sub>15</sub> N		104 v		1 ppm = 4.22 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.24 ppm				T3
413	1,1,1-Trifluoroethane		Methylfluoroform	84.0	Gas	-48	Gas	Gas		6.8				714
	CAS 420-46-2		RI43a	2.90 r		-54 °F				-238				IIA
	CF <sub>3</sub> CH <sub>3</sub>	C <sub>2</sub> H <sub>3</sub> F <sub>3</sub>				1 ppm = 3.50 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.29 ppm				T1
414	Trifluoro methoxy benzene		Trifluoroanisene	162.1	1.23	102			2.0*					
	CAS 456-55-3	TFMB	Phenyl trifluoromethyl ether	5.60 r		216 °F			(135)					
	C <sub>6</sub> H <sub>5</sub> OCF <sub>3</sub>	C <sub>7</sub> H <sub>5</sub> F <sub>3</sub> O				1 ppm = 6.75 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.15 ppm				
415	Trimethoxymethane		Trimethyl orthoformate	106.1	0.97	104	31.3	13	1.4*					255
	CAS 149-73-5	TMOF	Formic acid-o-trimethyl ester	3.66 r		219 °F		55 °F	(62)					IIB
	CH(OCH <sub>3</sub> ) <sub>3</sub>	C <sub>4</sub> H <sub>10</sub> O <sub>3</sub>				1 ppm = 4.42 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.23 ppm				T3
416	Trimethoxysilane		Trimethoxy silylhydride	122.2	0.96	81	9.6		1.0*					
	CAS 2487-90-3	TMOS		4.22 r		178 °F			(51)					
	(CH <sub>3</sub> O) <sub>3</sub> SiH	C <sub>3</sub> H <sub>10</sub> O <sub>3</sub> Si				1 ppm = 5.09 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.20 ppm				
417	Trimethyl-o-acetate		1,1,1-Trimethoxyethane	120.2	0.96	108	20		1.5*					
	CAS 1445-45-0	TMOA	Trimethoxyethane	4.15 r		226 °F			(75)					
	CH <sub>3</sub> C(OCH <sub>3</sub> ) <sub>3</sub>	C <sub>5</sub> H <sub>12</sub> O <sub>3</sub>	Acetic acid-o-trimethyl ester			1 ppm = 5.01 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.20 ppm				
418	Trimethylamine		N,N-Dimethylmethanamine	59.1	Gas	3	Gas	Gas	2.0	2.0	2.0	2.0	2.0	190
	CAS 75-50-3	TMA		2.04 r		37 °F			(49)	(49)	(49)	(49)	(49)	IIA
	(CH <sub>3</sub> ) <sub>3</sub> N	C <sub>3</sub> H <sub>9</sub> N				1 ppm = 2.46 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.41 ppm				T4

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks	
406			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)		
			IR	Polytron 5700 type 340	100 %LEL (?)		
407	200 (1112)	350 (1945)	IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (\$)		
			IR	Polytron 5700 type 334	100 %LEL (\$)		
408	11T (60)	25 (137)	IR	PIR 7000 type 334, P 8700 type 334	65 / 100 %LEL		
			IR	Polytron 5700 type 334	100 % LEL		
409		10 (61)	IR	PIR 7000 type 334, P 8700 type 334	80 / 100 %LEL (&)		
			IR	Polytron 5700 type 334	100 %LEL (&)		
			IR	PIR 7000 type 340, P 8700 type 340	65 / 100 %LEL		
			IR	Polytron 5700 type 340	100 %LEL		
410			EC	Polytron 7000 and P 8100 AC	Acid: 3 / 10 / 30 ppm / LDL = 0.5 ppm	S = 3.0	
			EC	Polytron 7000 and P 8100 HCl	TrCS: 5 / 10 / 20 ppm / LDL = 0.5 ppm		
411			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL		
			IR	Polytron 5700 type 334	50 + 100 %LEL		
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL		
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL		
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)		
412	1 (4.2)	25 (105)	CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison	
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL		
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL		
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL		
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL		
			IR	PIR 3000, P 5310, P 8310	100 %LEL		
			EC	Polytron 7000 and P 8100 NH3 LC	TEA: 100 ppm / LDL = 5 ppm		S = 0.5
			EC	Polytron 7000 and P 8100 NH3 TL	TEA: 100 ppm / LDL = 2 ppm		S = 0.55*
EC	Polytron 8100 NH3 FL	TEA: 100 ppm / LDL = 2 ppm	S = 0.55* / Polytron 8100 only				
413			IR	PIR 7000 type 334, P 8700 type 334	50 / 100 %LEL		
			IR	Polytron 5700 type 334	50 + 100 %LEL		
414			IR	PIR 7000 type 334, P 8700 type 334	100 %LEL (\$)		
			IR	Polytron 5700 type 334	100 %LEL (\$)		
415			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL		
			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)		
			IR	Polytron 5700 type 340	100 %LEL (?)		
416			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL		
			IR	Polytron 5700 type 334	50 + 100 %LEL		
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL		
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL		
			IR	PIR 3000, P 5310, P 8310	100 %LEL		
417			IR	PIR 7000 type 334, P 8700 type 334	15 / 100 %LEL		
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL		
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL		
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL		
			IR	PIR 3000, P 5310, P 8310	100 %LEL		
418		10 (25)	CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	corrosive/sensor poison	
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL		
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL		
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL		
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL		
			IR	PIR 3000, P 5310, P 8310	100 %LEL		
			EC	Polytron 7000 and P 8100 NH3 LC	TMA: 100 ppm / LDL = 5 ppm		S = 0.5
			EC	Polytron 7000 and P 8100 NH3 TL	TMA: 100 ppm / LDL = 2 ppm		S = 0.55*
EC	Polytron 8100 NH3 FL	TMA: 100 ppm / LDL = 2 ppm	S = 0.55* / Polytron 8100 only				

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
419	1,2,4-Trimethylbenzene		Pseudocumene	120.2	0.88	169	2.1	50	0.8		0.9	0.9		485
	CAS 95-63-6			4.15 r		336 °F		122 °F	(40)		(45)	(45)		IIA
	C <sub>6</sub> H <sub>3</sub> (CH <sub>3</sub> ) <sub>3</sub>	C <sub>9</sub> H <sub>12</sub>				1 ppm = 5.01 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.20 ppm			T1
420	1,3,5-Trimethylbenzene		Mesitylene	120.2	0.87	165	2.7	44	1.0	0.8			0.8	550
	CAS 108-67-8			4.15 r		329 °F		111 °F	(50)	(40)		(40)		IIA
	C <sub>6</sub> H <sub>3</sub> (CH <sub>3</sub> ) <sub>3</sub>	C <sub>9</sub> H <sub>12</sub>				1 ppm = 5.01 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.20 ppm			T1
421	Trimethyl borane		Boron trimethyl	55.9	Gas	-20	Gas	Gas						
	CAS 593-90-8	TMB		1.93 r		-4 °F								
	B(CH <sub>3</sub> ) <sub>3</sub>	C <sub>3</sub> H <sub>9</sub> B				1 ppm = 2.33 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.43 ppm			
422	2,2,4-Trimethyl hexane		i-Nonane	128.3	0.71	126	16	15	0.7					
	CAS 16747-26-5		Isononane	4.43 r		259 °F		59 °F	(37)					IIA
	C <sub>2</sub> H <sub>5</sub> CH(CH <sub>3</sub> ) CH <sub>2</sub> C(CH <sub>3</sub> ) <sub>3</sub>	C <sub>9</sub> H <sub>20</sub>		79 v		1 ppm = 5.35 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.19 ppm			
423	2,2,4-Trimethylpentane		i-Octane	114.2	0.69	99	53	-12	1.0	0.7		1.1	1.0	410
	CAS 540-84-1		Isooctane	3.94 r		210 °F		10 °F	(48)	(33)		(52)	(48)	IIA
	CH <sub>3</sub> CH(CH <sub>3</sub> )CH <sub>2</sub> C(CH <sub>3</sub> ) <sub>3</sub>	C <sub>8</sub> H <sub>18</sub>		103 v		1 ppm = 4.76 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.21 ppm			T2
424	2,4,4-Trimethyl-1-pentene		a-Diisobutylene	112.2	0.72	101	46	-6	0.8			0.8		415
	CAS 107-39-1		Di-i-butylene	3.87 r		214 °F		21 °F	(37)		(37)			IIA
	CH <sub>2</sub> =C(CH <sub>3</sub> )CH <sub>2</sub> C(CH <sub>3</sub> ) <sub>3</sub>	C <sub>8</sub> H <sub>16</sub>		78 v		1 ppm = 4.68 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.21 ppm			T2
425	Trimethyl silane		2-Methyl-2-silapropane	74.2	Gas	7	Gas	Gas	1.3					235
	CAS 993-07-7	TMS		2.56 r		45 °F			(40)					
	SiH(CH <sub>3</sub> ) <sub>3</sub>	C <sub>3</sub> H <sub>10</sub> Si				1 ppm = 3.09 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.32 ppm			T3
426	Trimethylsilanol		Hydroxytrimethylsilane	90.2	0.81	98	16	16	1.4					380
	CAS 1066-40-6	TMS	Trimethylhydroxysilane	3.11 r		208 °F		61 °F	(53)					
	(CH <sub>3</sub> ) <sub>3</sub> SiOH	C <sub>3</sub> H <sub>10</sub> OSi				1 ppm = 3.76 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.27 ppm			T2
427	1,3,5-Trioxane		Trioxymethylene	90.1	1.17	115	11	45	3.6	3.2		3.6	3.2	410
	CAS 110-88-3		1,3,5-Trioxacyclohexane	3.11 r		239 °F		113 °F	(135)	-120		(135)	-120	II B
	(CH <sub>2</sub> ) <sub>3</sub> O <sub>3</sub>	C <sub>3</sub> H <sub>6</sub> O <sub>3</sub>	Metaformaldehyde			1 ppm = 3.75 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.27 ppm			T2
428	Tri-n-propylamine		N,N-Dipropyl-1-propanamine	143.3	0.75	156	3.5	35	0.7			0.7		180
	CAS 102-69-2		Tripropyl amine	4.95 r		313 °F		95 °F	(42)			(42)		
	(C <sub>3</sub> H <sub>7</sub> ) <sub>3</sub> N	C <sub>9</sub> H <sub>21</sub> N				1 ppm = 5.97 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.17 ppm			T4
429	Tungsten hexafluoride			297.8	Gas	17	Gas	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.	n. a.
	CAS 7783-82-6			10.28 r		63 °F								
	WF <sub>6</sub>	F <sub>6</sub> W				1 ppm = 12.41 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.08 ppm			
430	n-Undecane		Hendecane	156.3	0.74	196	0.5	61	0.6					195
	CAS 1120-21-4	C11		5.40 r		385 °F		142 °F	(39)					IIA
	C <sub>11</sub> H <sub>24</sub>	C <sub>11</sub> H <sub>24</sub>				1 ppm = 6.51 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.15 ppm			T4
431	Vinyl acetate		Vinyl ethanoate	86.1	0.93	72	120	-8	2.6	2.6	2.6	2.6	2.6	385
	CAS 108-05-4	VAM	Acetic acid vinyl ester	2.97 r		162 °F		18 °F	(93)	(93)	(93)	(93)	(93)	IIA
	CH <sub>3</sub> COOCH=CH <sub>2</sub>	C <sub>4</sub> H <sub>6</sub> O <sub>2</sub>	Acetic acid ethenyl ester	150 v		1 ppm = 3.59 mg/m <sup>3</sup>					1 mg/m <sup>3</sup> = 0.28 ppm			T2
			Ethenyl acetate											
		Ethenyl ethanoate												
		1-Acetoxyethylene												

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
419	20 (100)	25 (125)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	25 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
420	20 (100)	25 (125)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL // 2000 ppm Gas-Library	
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL // 1600 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
421			EC	Polytron 7000 and P 8100 Hydrides		on request
422			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL // 1400 ppm Gas-Library	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL // 560 ppm Gas-Library	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
423			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL // 1400 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL // 700 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
424			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			EC	Polytron 7000 and P 8100 OVI	as EtOH (100 / 200 / 300 ppm)	S = 0.6 (L)
425	5 (15)		EC	Polytron 7000 and P 8100 Hydrides	TMS: 5 / 20 / 20 ppm / LDL = 0.3 ppm	S = 0.11
			EC	Polytron 7000 and P 8100 Hydrides SC	TMS: 1 / 5 / 20 ppm / LDL = 0.2 ppm	S = 0.15
426			IR	PIR 7000 type 334, P 8700 type 334	40 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	25 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
427			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	solid - melting point 62 °C
428			IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	10 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
429			EC	Polytron 7000 and P 8100 AC	WF6: 3 / 10 / 30 ppm / LDL = 0.5 ppm	
430			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
431	5 (18)	4c (14)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	polymerizing/sensor poison
			IR	PIR 7000 type 334, P 8700 type 334	60 / 100 %LEL	
			IR	Polytron 5700 type 334	100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
			EC	Polytron 7000 and P 8100 OVI	VAc: 20 / 50 / 100 ppm / LDL = 5 ppm	S = 0.8

No.	Substance Chemical formula	Shortn. S-formula	Further synonyms	Molw. g/mol	Dens. g/ml	Boil. °C	P <sub>20</sub> mbar	Flpt. °C	LEL PTB	LEL IEC	LEL NIOSH	LEL NFPA	LEL RUS	AIT °C
432	Vinylacetylene		Butenyne	52.1	Gas	5	Gas	Gas	2.0			2.1		
	CAS 689-97-4		Butenine	1.80 r		41 °F			(43)			(46)		
	CH <sub>2</sub> =CHCCH	C <sub>4</sub> H <sub>4</sub>	1-Buten-3-yne 3-Butenyne-1			1 ppm = 2.17 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.46 ppm				
433	Vinyl chloride		Chloroethene	62.5	Gas	-13	Gas	Gas	3.8	3.6	3.6	3.6	3.6	415
	CAS 75-01-4	VCM	Chloroethylene	2.16 r		9 °F			(99)	(94)	(94)	(94)	(94)	IIA
	CH <sub>2</sub> =CHCl	C <sub>2</sub> H <sub>3</sub> Cl	R1140			1 ppm = 2.60 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.38 ppm				T2
434	Vinylcyclohexane		Ethenylcyclohexane	110.2	0.81	128			0.9**					
	CAS 695-12-5		Cyclohexylethylene	3.80 r		262 °F			-41					
	C <sub>6</sub> H <sub>11</sub> CH=CH <sub>2</sub>	C <sub>8</sub> H <sub>14</sub>	Cyclohexylethene Hexahydrostyrene			1 ppm = 4.59 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.22 ppm				
435	4-Vinylcyclohexene		1.2.5.6-Tetrahydrostyrene	108.2	0.83	128	14	15	0.6	0.8		1.0	0.8	265
	CAS 100-40-3	VCH	4-Ethenyl-1-cyclohexene	3.73 r		262 °F		59 °F	(27)	(36)		(45)	(36)	IIA
	C <sub>6</sub> H <sub>9</sub> CH=CH <sub>2</sub>	C <sub>8</sub> H <sub>12</sub>	Cyclohexenylethylene	49 v		1 ppm = 4.51 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.22 ppm				T3
436	Vinyl fluoride		Fluoroethene	46.0	Gas	-72	Gas	Gas	2.9			2.6		375
	CAS 75-02-5	VF	Fluoroethylene	1.59 r		-98 °F			(56)			(50)		
	CH <sub>2</sub> =CHF	C <sub>2</sub> H <sub>3</sub> F	R1141			1 ppm = 1.92 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.52 ppm				T2
437	Vinylmethyl ether		Methoxyethene	58.1	Gas	6	Gas	Gas	2.2			2.6		220
	CAS 107-25-5	VME	Ethenyl methylether	2.01 r		43 °F			(53)			(63)		II B
	CH <sub>2</sub> =CHOCH <sub>3</sub>	C <sub>3</sub> H <sub>6</sub> O	Methylvinyl ether			1 ppm = 2.42 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.41 ppm				T3
438	Vinylmethylketone		Methylvinylketone	70.1	0.83	81	100	-7				2.1		
	CAS 78-94-4	MVK	1-Buten-3-one	2.42 r		178 °F		19 °F				(61)		
	CH <sub>3</sub> COCH=CH <sub>2</sub>	C <sub>4</sub> H <sub>6</sub> O	Methylene acetone			1 ppm = 2.92 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.34 ppm				
439	2-Vinylpyridine		2-Ethenylpyridine	105.1	0.97	159	2.5	35		1.2			1.2	482
	CAS 100-69-6	2VP	2-Pyridylethylene	3.63 r		318 °F		95 °F		(53)			(53)	IIA
	C <sub>5</sub> H <sub>4</sub> N(CH=CH <sub>2</sub> )	C <sub>7</sub> H <sub>7</sub> N	2-Pyridylethene			1 ppm = 4.38 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.23 ppm				T1
440	Vinyltrimethoxysilane		Ethenyltrimethoxysilane	148.2	0.97	124		23	0.7					235
	CAS 2768-02-7	VTMOS	Trimethoxy vinylsilane	5.12 r		255 °F		73 °F	(43)					II B
	CH <sub>2</sub> =CHSi(OCH <sub>3</sub> ) <sub>3</sub>	C <sub>5</sub> H <sub>12</sub> O <sub>3</sub> Si	Trimethoxy silylethene	67 v		1 ppm = 6.18 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.16 ppm				T3
441	m-Xylene		1.3-Dimethylbenzene	106.2	0.86	139	8.3	25	1.0	1.0	1.1	1.1		540
	CAS 108-38-3		m-Xylol	3.67 r		282 °F		77 °F	(44)	(44)	(49)	(49)		IIA
	C <sub>6</sub> H <sub>4</sub> (CH <sub>3</sub> ) <sub>2</sub>	C <sub>8</sub> H <sub>10</sub>		77 v		1 ppm = 4.43 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.23 ppm				T1
442	o-Xylene		1.2-Dimethylbenzene	106.2	0.88	144	6.7	30	1.0	1.0	0.9	0.9	1.0	465
	CAS 95-47-6		o-Xylol	3.67 r		291 °F		86 °F	(44)	(44)	(40)	(40)	(44)	IIA
	C <sub>6</sub> H <sub>4</sub> (CH <sub>3</sub> ) <sub>2</sub>	C <sub>8</sub> H <sub>10</sub>		75 v		1 ppm = 4.43 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.23 ppm				T1
443	p-Xylene		1.4-Dimethylbenzene	106.2	0.86	138	8.9	25	1.0	0.9	1.1	1.1		540
	CAS 106-42-3		p-Xylol	3.67 r		280 °F		77 °F	(44)	(40)	(49)	(49)		IIA
	C <sub>6</sub> H <sub>4</sub> (CH <sub>3</sub> ) <sub>2</sub>	C <sub>8</sub> H <sub>10</sub>		77 v		1 ppm = 4.43 mg/m <sup>3</sup>				1 mg/m <sup>3</sup> = 0.23 ppm				T1

No.	WEL Germ.	TLV USA	MP	Detectable with	Suitable measuring ranges	Important remarks
432			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL (?)	polymerizing/sensor poison
433		1 (2.6)	CT EC	P 5200, P 8200, PEX 3000, SE Ex Polytron 7000 and P 8100 OVI	10 // 100 %LEL VC: 20 / 50 / 100 ppm / LDL = 5 ppm	corrosive/sensor poison S = 0.8
434			IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL (?)	
435			IR	PIR 7000 type 340, P 8700 type 340	100 %LEL (?)	
			IR	Polytron 5700 type 340	100 %LEL (?)	
			EC	Polytron 7000 and P 8100 OVI	as EtOH (100 / 200 / 300 ppm)	S = 0.5 (L)
436		1 (1.9)	EC	Polytron 7000 and P 8100 OVI	as VC (20 / 50 / 100 ppm)	S = 0.8 (L)
437	50 (121)		IR	PIR 7000 type 334, P 8700 type 334	25 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	20 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
438			CT	P 5200, P 8200, PEX 3000, SE Ex	100 %LEL	
439			IR	PIR 7000 type 334, P 8700 type 334	35 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
440			IR	PIR 7000 type 334, P 8700 type 334	20 / 100 %LEL	
			IR	Polytron 5700 type 334	20 + 50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	15 / 100 %LEL	
			IR	Polytron 5700 type 340	20 + 50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
441	100 (443)	100 (443)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	30 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
442	100 (443)	100 (443)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	performance approved with sensor ... DD
			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL // 2500 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 334	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 7000 type 340, P 8700 type 340	30 / 100 %LEL // 2500 ppm Gas-Library	performance approved
			IR	Polytron 5700 type 340	50 + 100 %LEL Gas-Library	performance approved
			IR	PIR 3000, P 5310, P 8310	100 %LEL	
443	100 (443)	100 (443)	CT	P 5200, P 8200, PEX 3000, SE Ex	10 // 100 %LEL	
			IR	PIR 7000 type 334, P 8700 type 334	30 / 100 %LEL	
			IR	Polytron 5700 type 334	50 + 100 %LEL	
			IR	PIR 7000 type 340, P 8700 type 340	30 / 100 %LEL	
			IR	Polytron 5700 type 340	50 + 100 %LEL	
			IR	PIR 3000, P 5310, P 8310	100 %LEL	

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