Dräger CPS 7800
Gas-Tight Suit

The reusable gas-tight Dräger CPS 7800 provides excellent protection against gaseous, liquid, aerosol and solid hazardous substances even in explosive areas. Due to its innovative material and the new suit design it offers increased flexibility and comfort when entering confined spaces and working with cryogenic substances.

Flexible gas-tight face cuff (optional)
- Can be combined with various full face masks

Braces
- Increases wearing comfort

Gas-tight zipper with cover flap on the front side
- Closes from top to bottom
- No help of a second person required for donning
- Cover flap made from suit material with hook-and-loop fastener protects the external zipper chain

Diagonal zipper design
- For easier donning and doffing

Chemical-tight safety gloves
- Easily replaceable
- Attached to the suit

Ventilation system Dräger RV PT 120 L (optional)
- A connection to a compressed air hose system, a ring line or an external air supply is possible: when connected an adjustable air flow cools the suit and reduces the humidity inside. At the same time, the system ensures the breathing air supply for longer periods of use

Integrated safety boots facilitate donning on the suit
- Alternatively, gas tight socks can be chosen which offers flexibility when selecting boots
Benefits

Reliable protection

The Dräger CPS 7800 (Typ 1b) protects against a multitude of possible dangers when dealing with hazardous substances. The novel antistatic material D-mex™ offers excellent chemical resistance and protection against mechanical influences. The Dräger CPS 7800 exceeds the requirements of international industry standards for reusable protective suits.

D-mex™: 5-fold safety

D-mex™, the unique suit material, consists of five layers and its reliability has been proven during hazardous substance deployments by the fire service. Tear-proof textile forms the middle layer; on the inside and outside there is a particularly robust elastomer layer, as well as a chemically high-resistant barrier layer. With this design, the suit retains its full protection performance even if the outer material is damaged.

Fitted, flexible and comfortable

The Dräger CPS 7800 increases the wearing comfort even during difficult work in hazardous areas. With its ergonomic cut and five sizes to choose from it offers the highest degree of flexibility for wearers ranging from 1.50 m to 2.05 m in height. In addition, the light and soft suit material adapts ideally for a full range of movement. Offered as an option, individually adjustable braces provide even greater wearing comfort to the user and an improved fit of the suit. A newly designed fit means you don the Dräger CPS 7800 with more ease, can put on and remove the suit by yourself, and shut the zip fasteners without assistance.

Always ready

Time and expense for regular testing could be reduced significantly through innovative materials and new service concepts. The suit can also be cleaned and disinfected automatically without complications. This reduces the effort required to keep the suit ready for use over its lifetime of up to 15 years. An unused suit with face cuff can even be stored for five years without servicing. If repair or maintenance is required, this can be performed by the service technician. Of course, DrägerService is equally happy to perform these tasks.

Ready for the extraordinary

With optional accessories, the Dräger CPS 7800 can be adapted to be even more individual to meet your specific requirements and in turn extend your deployment options further. The suit is available with an integrated Panorama Nova full face mask or face cuff. Stress reduction, especially during prolonged use, can be achieved by equipping the suit with ventilation systems. The Dräger CPS 7800 features an optional ventilation system with the integrated regulating valve PT 120 L that can be connected to different breathing air sources. The suit can also be printed with a customer-specific design, if desired. The Dräger CPS 7800 training suit permits you to perform exercises in realistic scenarios outside contaminated areas with the same equipment characteristics.
System Components

Dräger Panorama® Nova

The respiratory mask Panorama® Nova meets the highest standards of protection, sealing and quality. For decades proven worldwide, the full face mask represents absolute reliability in the protection of the respiratory tract and eyes.

Dräger PAS® Filter series

PAS® Filters reliably clean air, e.g. from an existing high-pressure network, from liquid and solid particles, including oil vapour and smell. This not only means that you get breathing air which even exceeds the specifications of DIN EN 12021. You also save yourself the need of a separate breathing air line.

Dräger PAS® Lite

For use in industrial applications where a simple, robust and easy to use breathing apparatus is required, the Dräger PAS® Lite Self-Contained Breathing Apparatus (SCBA) combines reliability with comfort and performance, as well as excellent service life and easy maintenance.

Dräger PAS® ASV

The Dräger Automatic Switch over Valve (PAS® ASV) enables the user to connect compressed air breathing apparatus to an external air supply, such as a factory ring main, and be safe in the knowledge that if the external supply were to fail, there would be a safe and uninterrupted transition to the wearer’s back-up air supply.
System Components

**Dräger Comfort Vest**

Increased performance by up to four hours – without the need for elaborate preparation or logistics: when work gets hot, the Dräger Comfort Vest CVP 5220 is always ready to use as it delivers the cooling action itself. This means: no pre-freezing, no dipping into water, no risk due to dangerous circulating air – and no time loss.

**Dräger PAS® AirPack 1**

Designed using leading technology and materials, Dräger’s range of heavy-duty airline apparatus is ideal for use where an extended duration of breathing air is called for. Chemical tank cleaning, toxic spillages or certain tasks when working on offshore installations are all made easier and more comfortable when using the Dräger PAS® AirPack 1.

**Dräger HPS® 7000**

The Dräger HPS® 7000 firefighter’s helmet is in a class of its own, thanks to its innovative, sporty and dynamic design, ergonomic fit and components which make it a multifunctional system solution. It provides optimum protection during every operation.
Accessories

**Dräger PT 120 L control valve**

Cooling effect on the body and additional breathing air from external sources.

**Socks with gaiters**

Can be worn with the safety boots and, therefore, providing maximum wearer comfort.

**New EN-glove combination**

Combining mechanical and chemical protection in one – offering high sensitivity, in sizes 10 to 11 (laminate glove/Trictrl).

**Tricotril® over gloves**

Cut resistance and chemical protection glove all in one, available in sizes 10 and 11.
Accessories

**Rubber ring**
For fixing the over glove to the sleeve.

**Nitrile-P boots**
Firefighter’s boots with toecaps, provide excellent protection against penetration, cutting and abrasion. Extra comfortable, in sizes 43 to 50.

**Cotton gloves**
Optional glove for hygienic wear under chemical protection gloves.

**K-MEX® Gigant over gloves**
Additional cut resistance, available in size 14.
Related Products

**Dräger CPS 7900**

Tailor-made for use under extreme conditions: The gas-tight Dräger CPS 7900 provides excellent protection against industrial chemicals, biological agents, and other toxic substances. Its innovative material qualifies the CPS 7900 equally well for work in explosive areas and for handling cryogenic substances.

**Dräger CPS 5900**

The Dräger CPS 5900 is the ideal disposable, gas-tight chemical protective suit for hazmat incidents. Where complete protection against hazardous gases, liquids and particles is of the utmost priority, this lightweight garment is the suit of choice.

**Dräger CPS 5800**

The Dräger CPS 5800 is a limited-use chemical protective suit for industrial applications and operations on board that involve a gaseous, liquid or solid hazardous substance.
### Technical Data

#### Suit material
- **D-mex™**

#### Temperature
- **During use**: -30 °C to +60 °C (temperatures as low as -80 °C are possible for short-term exposure and have been tested by Dräger for the D-mex™ material (but not as part of the EC type approval test))
- **During storage**: -30 °C to +60 °C

#### Weight
- With face cuff and socks: approx. 3.5 kg without ventilation system
- With face cuff and boots: approx. 5.4 kg without ventilation system
- With full face mask and socks: approx. 4.3 kg without ventilation system
- With full face mask and boots: approx. 6.2 kg without ventilation system

### APPROVALS
- **EN 943-1:2002**: EU requirements for gas-tight protective suits for industrial applications
- **EN 943-2:2002 (ET)**: EU requirements for gas-tight protective suits for use by firefighters
- **EN 1073-1/2**: Protection against contamination from radioactive particles
- **EN 14126**: Protection against contamination from infectious agents
- **EN 14593**: Supply via air line breathing apparatus with lung governed demand valve
- **vfdb 08/01:2006-11**: German requirements for gas-tight protective suits for use by fire services (pending)
- **BS 8467**: British requirements for gas-tight NBC protective suits
- **SOLAS**: Requirements for the use on deep-sea vessels

### CHEMICAL TESTS

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Permeation time in min*</th>
<th>Chemical</th>
<th>Permeation time in min*</th>
<th>Chemical</th>
<th>Permeation time in min*</th>
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<tbody>
<tr>
<td>Acetone</td>
<td>&gt;540</td>
<td>Ethyl acetate</td>
<td>&gt;540</td>
<td>Sarin (GB)**</td>
<td>&gt;1440</td>
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<td>Acetonitrile</td>
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<td>Ethylene oxide</td>
<td>&gt;540</td>
<td>Sodium hydroxide 40 %</td>
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<td>Ammonia</td>
<td>&gt;540</td>
<td>Hydrogen chloride</td>
<td>&gt;540</td>
<td>Soman (GD)**</td>
<td>&gt;1440</td>
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<td>1,3-Butadiene</td>
<td>&gt;540</td>
<td>Lewisite (L)**</td>
<td>&gt;180</td>
<td>Sulphuric acid 96 %</td>
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<td>Carbon disulphide</td>
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<td>Methanol</td>
<td>&gt;540</td>
<td>Tetrachloroethylene</td>
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<td>Chlorine</td>
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<td>Methyl chloride</td>
<td>&gt;540</td>
<td>Tetrahydrofuran</td>
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<td>Dichromemethane</td>
<td>&gt;540</td>
<td>Mustard gas (HD)**</td>
<td>&gt;1440</td>
<td>Toluene</td>
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<tr>
<td>Diethylamine</td>
<td>&gt;540</td>
<td>n-Heptane</td>
<td>&gt;540</td>
<td>VX**</td>
<td>&gt;1440</td>
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* Permeation times in accordance with EN 943 part 2.
** Permeation times in accordance with FINABEL 0.7.C

Via the constantly updated Dräger VOICE database you can find out about chemical resistance and decontamination processes: [http://www.draeger.com/voice](http://www.draeger.com/voice)

### MECHANICAL TESTS

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<thead>
<tr>
<th>Test in accordance with EN 943</th>
<th>Class***</th>
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<tr>
<td>Abrasion resistance</td>
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</tr>
<tr>
<td>Flex-cracking resistance</td>
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<tr>
<td>Flex-cracking resistance at -30 °C</td>
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<tr>
<td>Tear resistance</td>
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</tr>
<tr>
<td>Burst strength</td>
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<td>Penetration resistance</td>
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</table>
### Technical Data

*** classes in accordance with EN 943 part 2 – from 1 (lowest) to 6 (highest).

### Ordering Information

<table>
<thead>
<tr>
<th>Dräger CPS 7800</th>
<th>Blue or orange</th>
<th>R 29 650</th>
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<tbody>
<tr>
<td>Dräger CPS 7800 Training</td>
<td>Blue (Umex material)</td>
<td>R 29 700</td>
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<tr>
<td>Sizes</td>
<td>Size S for body heights from 1.50 m to 1.65 m</td>
<td>Basic components</td>
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<tr>
<td></td>
<td>Size M for body heights from 1.60 m to 1.75 m</td>
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<tr>
<td></td>
<td>Size L for body heights from 1.70 m to 1.85 m</td>
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<tr>
<td></td>
<td>Size XL for body heights from 1.80 m to 1.95 m</td>
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<td>Size XXL for body heights from 1.90 m to 2.05 m</td>
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<td>Integrated boots or socks</td>
<td>Safety boots in sizes 43 to 50 (German sizing system)</td>
<td>Basic components</td>
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<td></td>
<td>Gas-tight socks in 3 sizes from 40 to 50 (German sizing system)</td>
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<tr>
<td>Face connection</td>
<td>Face cuff (gas-tight) Integrated full face mask</td>
<td>Basic components</td>
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<tr>
<td>Gloves</td>
<td>Previous EN combination (FKM) in sizes 9 to 11</td>
<td>Basic components</td>
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<tr>
<td></td>
<td>Previous EN combination (FKM/Butyl) in sizes 9 to 11</td>
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</tr>
<tr>
<td></td>
<td>New EN combination (foil glove/Tricotril®) in sizes 10 to 11</td>
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<tr>
<td>Glove accessories</td>
<td>Cotton gloves</td>
<td>Accessories</td>
</tr>
<tr>
<td></td>
<td>Gas-tight arm sleeve/wristband Cut-resistant overgloves Tricotril® or K-MEX® Gigant</td>
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<tr>
<td>Ventilation</td>
<td>Regulating valve PT 120 L</td>
<td>Accessories</td>
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<tr>
<td>Wearing comfort</td>
<td>Braces</td>
<td>Accessories</td>
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<tr>
<td>Storage and transport</td>
<td>Carry bag CPS Storage and carry bag Storage box</td>
<td>Accessories</td>
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<tr>
<td>Customer-specific printing</td>
<td>On thigh, lower arm front or upper arm rear in various colours</td>
<td>Accessories</td>
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</tbody>
</table>

The modular system allows the protective suit to be adapted to the customer's individual requirements.

Tricotril® is a registered trademark of KCL GmbH.

K-MEX® is a registered trademark of KCL GmbH.
Notes

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