

## Dräger CPS 7900 Chemical Protective Suit

The Dräger CPS 7900 chemical protective suit is tailor-made for use under extreme conditions. The gas-tight CPS 7900 provides excellent protection against industrial chemicals, biological agents, warfare agents, and other toxic substances. Its unique materials qualify the CPS 7900 equally well for working in explosive settings and for handling cryogenic materials.



D-8573-2010

### PROTECTION IN A CLASS OF ITS OWN

Go into any hazardous materials situation with peace of mind when wearing the Dräger CPS 7900. The CPS 7900 meets the most recent NFPA 1991 standard – as well as the requirements of fire departments, search and rescue organizations, and industrial organizations for reusable chemical protection suits. The multiple benefits of the CPS 7900 include:

- High puncture resistance
- Wide field of view
- Low cost of ownership
- 15-year shelf-life
- Outstanding wearer comfort

The Dräger CPS 7900 was developed in close cooperation with safety officers and personnel the world over and designed in response to their needs and requirements. The suit's properties and accessory options offer a high degree of safety and wearing comfort.

### D-MEX™ OFFERS 5-FOLD SAFETY

The Dräger CPS 7900 is constructed of D-mex™, an innovative material that consists of five layers including a sturdy elastomer layer that resists puncture and a barrier layer that resists chemicals both inside and outside the suit. The middle

layer consists of a durable tear-proof textile. The benefits of D-mex™ include the following:

- Full protective capacity is retained even when the outside material is damaged
- Electrostatic resistance allows use in explosive settings
- Flame-retardant and self-extinguishing materials provide burn protection
- Flexibility enables handling of liquefied gases such as ammonia at contact temperatures of -80° C (-112°F)

### OUTSTANDING COMFORT AND SAFETY

The Dräger CPS 7900 increases safety and reduces stress during the difficult work of chemical hazard management. With its new, ergonomic cut and five available sizes, the suit offers superior mobility to wearers with a body height of 4'11" to 6'11". The suit is designed to be used in conjunction with other Dräger protective gear including the Dräger PSS 7000 and is compatible with the Dräger BG-4 CCBA. The light weight and improved drape of the suit material accommodate the wearer's movements and offer a full range of flexibility, creating added comfort while allowing the user to be more productive.



D-4809-2010

Dräger CPS 7900



#### READY AT ANY TIME

The innovative materials of the Dräger CPS 7900 are easily cleaned and disinfected, resulting in significantly reduced costs over the 15-year average lifespan of the suit. Any maintenance or repairs can be provided by trained service technicians. Of course, Dräger Service can also perform these functions.

#### SMART DETAILS FROM HEAD TO TOE

The Dräger CPS 7900 is characterized by innovative functional details. When used with the Dräger FPS 7000 full-face mask, the newly designed visor of the Dräger CPS 7900 provides an almost unlimited field of vision. Two different glove combinations can be fastened to the suit easily and without the use of tools. Gas-tight socks made from D-mexT™ can be attached to the suit. The socks are available in multiple sizes designed to fit any wearer.

#### READY FOR THE EXTRAORDINARY

Accessories are available for customizing the Dräger CPS 7900 to meet your specific needs and expand your range of application options.

- The anti-fog visor prevents fogging and requires no pre-treatment, saving time when getting ready for an event
- The height adjustment feature allows users with different body types and heights to wear the suit comfortably
- The D-Connect™ can be used to fasten measuring instruments, flash lights, tools, or guide lines to the left or right hip, freeing both hands for other tasks. The suit can be equipped with two D-Connects, providing fixed anchoring points for use as grips during rescues



### CONTINUOUS FLOW OF BREATHING AND COOLING AIR

Breathing air is a scarce commodity during events involving toxic materials or hazardous atmospheres. The routes to the deployment and decontamination areas must be bridged. The hazard management tasks must be completed. The responders must be decontaminated so that suits can be removed. The amount of air available in a compressed air breathing apparatus is often insufficient to cover these multiple activities. The air-connect port and control valve PT 120L are designed for this reason.

The air-connect port is used to connect an external source of breathing air. Inside the suit, the compressed air breathing apparatus is connected to the air-connect port via an automatic switchover valve or Y-adaptor. Once the external air source is connected and sufficient pressure is achieved, breathing air is supplied by the external source. If the external connection fails or is severed, breathing air is provided by the internal compressed air breathing apparatus.

The control valve PT 120L offers the additional option of cooling and reducing the humidity inside the suit. Airflows of 5, 30, or 120 L/min provide cool compressed air to the legs, arms, and chest areas of the suit. Warm, humid air is extracted and vented to the outside through valves in the suit. The continuous airflow also makes it possible for perspiration to evaporate, cooling the body naturally.

This airflow system significantly reduces the stress of activities performed in warmer temperatures, e.g., traffic accident responses during the summer. In addition, the system enables a fully equipped rescue team to be placed on stand-by without losing breathing air and with minimal thermal stress.



D-5057-2010

Connection of the air line with the SCBA inside of the suit



D-4802-2010

The RV PT 120 L is a connection to an external source of breathing air and features controllable suit cooling.



D-4714-2010

The height adjustment is used to fit the suit to various body heights.



D-4663-2010

The air-connect is a connection to an external source of breathing air.



D-4910-2010

The D-Connect™ can be used to attach tools and for rescue operations.



ST-1639-2007



D-4895-2010

Gas-tight socks offer flexibility when selecting boots.



D-4646-2010

With the Dräger glove attachment, gloves can be exchanged easily and without tools.

**TECHNICAL DATA**

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
BS 8467	British requirements for CBRN protective suits
EN 1073-2	Protection against contamination from radioactive particles
EN 14126	Protection against contamination from infectious agents
SOLAS (pending)	Requirements for maritime use
EX-PROTECTION	Suitable for operations in all explosive areas
NFPA 1991	

**CHEMICAL TESTS**

Chemical	Breakdown time in min*	Chemical	Breakdown time in min*	Chemical	Breakdown time in min*
Acetone	>540	Ethyl acetate	>540	Sarin (GB)**	>1440
Acetonitrile	>540	Ethylene oxide	>540	Sodium hydroxide 40%	>540
Ammonia	>540	Hydrogen chloride	>540	Soman (GD)**	>1440
1,3-Butadiene	>540	Lewisite (L)**	>180	Sulfuric acid 96%	>480
Carbon disulfide	>540	Methanol	>540	Tetrachlorethylene	>540
Chlorine	>540	Methyl chloride	>540	Tetrahydrofuran	>540
Dichloromethane	>540	Mustard gas (HD)**	>1440	Toluene	>540
Diethylamine	>540	n-Heptane	>540	VX**	>1440

A continuously updated database is available to stay informed about chemical resistances and decontamination processes.

\* breakthrough time according to EN 943 Part 2.

\*\* breath through time according to FINABEL 0.7.C

**MECHANICAL TESTS**

Test acc. to EN 943:	Class***
Abrasion resistance	6
Flex cracking resistance	6
Flex cracking resistance at -30 °C	6
Resistance to tear propagation	6
Bursting resistance	6
Piercing resistance	3

\*\*\* classes acc. to EN 943 Part 2 – from 1 (lowest) to 6 (highest)

## ORDER INFORMATION

		Order No.
Dräger CPS 7900		R 29 500
Colors Blue or orange		Basic components
Sizes	Size S for body heights 4'11" to 5'5"	Basic components
	Size M for body heights 5'3" to 5'9"	Basic components
	Size L for body heights 5'7" to 6'1"	Basic components
	Size XL for body heights 5'11" to 6'7"	Basic components
	Size XXL for body heights 6'5" to 6'11"	Basic components
Zipper	Closes at top or bottom	Basic components
	Cover flap with Velcro fastener or snaps	
Socks	Gas-tight socks in 3 sizes from 7 to 16	Basic components
Gloves	Previous EN combination in size 9 to 11	Basic components
	New EN combination in size 10 to 11	
	NFPA combination	
Gloves accessories	Cotton gloves	Accessories
	Gas-tight arm sleeve/wristband	
	Cut-resistant overgloves Tricotril or K-mex Gigant	
Clear view	Anti-fog visor	Accessories
External air supply	Regulation Valve PT 120 L	Accessories
	Air-connect	
Fastening option	D-connect at right and/or left hip	Accessories
Easier pressure monitoring	Pressure gauge holder	Accessories
Individually adjustable	Height adjustment	Accessories
Storage and transport	Electronic warehouse management transponder	Accessories
	Storage and transport bag	
	Storage box	
Customized marking:	In different colors on back, chest, and sleeves	Accessories

## HEADQUARTERS

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