Technical Data Sheet

Dräger Respiratory Filter

X-plore OV/AG/P100 + FM/CD/HF

1.0	**General Data**	
1.1	Manufacturer	Dräger Safety AG & Co. KGaA Revalstraße 1, D – 23 560 Luebeck, Germany
1.2	Designation	X-plore filter bayonet OV/CL/HC/SD/FM/CD/HF/P100
1.3	Dräger part no.	6738035
1.4	Intended use	Respiratory protection against industrial gases, vapors and particles in conjunction with a specified face piece. Scope of protection as indicated by product documentation, technical standards and installed application rules.
1.5	Relevant standards	Federal register 42 CFR part 84
1.6	Certification	TC – 84A – 4022, TC – 84A – 4014

2.0	**Design & Construction**		
2.1	Connection to facepiece	Dräger-specific bayonet connection	
2.2	Materials	Cartridge housing: Sorbents: Particle filter: Labels:	ABS-plastic activated carbon micro-glass fibres paper
2.3	Design	The cartridge housing is tear drop shaped. At the inhalation side the cartridge housing has integrated air inlets. There is one filter bed with activated carbon. It is fixed by the housing parts and fleece materials. The particle filter is made of pleated paper. A leaktight connection between the particle filter and the particle filter housing is performed by glue. The gas filter part and the particle filter are connected leaktightly by ultrasonic welding.	
2.4	Working principle	Gases and vapors are removed from the ambient air by adsorption onto the sorbent (carbon), particles are filtered by the fibre filter.	
2.5	Shelf life	max. 6 years (4+2) from date of production	
2.6	Dimensions	Outer diameter: Height (incl. bayonet connection): Volume carbon: Volume of the filter:	106 x 84 mm (L x B) 59 mm 107 ml 186 ml
2.7	Weight	Excl. package:	approx. 140 g

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3.0	**Performance Data**	(minimum data in accordance with standard)	
3.1	Particle filtration efficiency	Test aerosol: Minimum efficiency (42 CFR 84):	DOP 99.97%
3.2	Gas filtration capacity	Test conditions (42 CFR 84):	25º C, % rel. humidity differs per gas

Type	Test gas	Test Condition / Flow rate (LPM)	Concentration	Breakthrough Concentration	Minimum Service Life
OV	Organic vapour: Carbon Tetrachloride (CCl_4)	as received / 64 equilibrated / 32	1,000 ppm	5 ppm	25 min
CL	Chlorine (Cl_2)	as received / 64 equilibrated / 32	500 ppm	5 ppm	17.5 min
HC	Hydrogen Chloride (HCl)	as received / 64 equilibrated / 32	500 ppm	5 ppm	25 min
SD	Sulfur Dioxide (SO_2)	as received / 64 equilibrated / 32	500 ppm	5 ppm	15 min
FM	Formaldehyde (HCHO)	as received / 64 equilibrated / 64	100 ppm	1 ppm	50 min
CD	Chlorine Dioxide (ClO_2)	as received / 64 equilibrated / 64	500 ppm	0.1 ppm	30 min
HF	Hydrogen Fluoride (HF)	as received / 64 equilibrated / 64	70 ppm	3 ppm	30 min

3.3	Inhalation breathing resistance (for system of mask and cartridges)	at ½ x 85 litres/min, constant flow (42 CFR 84)	with half mask: max. 50 mm H_2O initial with full face mask: max. 50 mm H_2O initial
3.4	Mechanical resistance	Resistant to shock and vibration as required by EN 14387:2004	
3.5	Chemical resistance	For normal use conditions the filter is resistant against temperature, humidity and corrosives. The filter is internally resistant against the filtering agents (sorbents). Ingress of water or other liquids must be avoided.	

4.0	**Documentation**	
4.1	Markings	Catridge label: showing color coding in accordance with 42 CFR part 84 and ANSI/AIHA Z88.7-2001, batch number, expiry date, filter type, part number, designation. Approval marking: **NIOSH**
4.2	Instructions for use	3 languages: US English, French, Spanish

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5.0	**Packing & Packaging**	
5.1	Package	The filters are packed in pairs in a sealed aluminium foil bag. 7 pairs are packed in a cardboard box accompanied by one instruction for use. The box is robust for normal transportation and storage, closed with factory label indicating part number, filter type, quantity, batch number, expiry date and storage conditions (temperature, humidity).
5.2	Packing unit	7 pairs

6.0	**User notes and limitations**	
6.1	System	For use with • Dräger half masks X-plore 3300 and X-plore 3500 • Dräger full face mask X-plore 5500
6.2	Limitations	The filter conforms to the minimum requirements of the standard indicated by the class and type of the filter it is marked with. It must be noted that laboratory values can differ from those measured in practice. This may result in longer or shorter break through times. The user must read and understand the instructions for use. Additionally the knowledge of all relevant application rules is mandatory (see in particular the limitations in use). Further information on request.

Dräger Safety AG & Co. KGaA