

Technical Data Sheet

Dräger PARAT 7500 Fire and Industrial Escape Hood

1.0 General Data		
1.1	Manufacturer	Dräger Safety AG & Co. KGaA, Revalstraße 1, D – 23560 Lübeck, Germany
1.2	Designation & Dräger part no.	1. PARAT 7520, Soft Pack R 59 427 (GTIN: 4026056008070) 2. PARAT 7530, Hard Case R 59 437 (GTIN : 4026056008087)
1.3	Intended use	Combined fire and industrial escape / respiratory protection (incl. eye protection) against toxic industrial gases, vapours and particles as well as carbon monoxide and other fire-related gases and smoke. For single use.
1.4	Useage Duration	At least 15 minutes in order for the user to escape to a safe area.
1.5	Certification	DIN 58647-7:1997 EN 403:2004(M) EC type test certificate, granted by accredited and notified Certification Body DEKRA EXAM GmbH, Dinnendahlstraße 9, 44809, Bochum, Germany
1.6	Further relevant standards	Filter additionally tested according to EN 14387:2004+A1:2008 Environmental simulation (IP- protection category test) acc. to EN 60529: Soft Pack: IP 5X Hard Case: IP 54
1.7	Export approval	No classification → no sales restrictions

2.0 Design & Construction (complete device)												
2.1	Design & material	The PARAT 7500 consists of: 1. hood with large visor 2. inner half-mask (integrated in hood) with filter assembly 3. industrial and fire escape filter ABEK1 CO P3 4. different packaging options (Soft Pack, Hard Case)										
2.1.1	Hood	The hood fits different sizes. The at one-side PU coated material has got the signal-colour neon yellow. The neck collar, made of polyester and elastane, seals at the neck. The large visor enables a wide field of vision. <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Hood material</td> <td>polyamide 6.6 with polyurethane coating</td> </tr> <tr> <td>Visor</td> <td>cellulose propionate</td> </tr> <tr> <td>Neck collar</td> <td>polyester and elastane</td> </tr> <tr> <td>Straps</td> <td>polyamide 6.6 and elastane</td> </tr> <tr> <td>Exhalation valve</td> <td>silicone (age-resistant)</td> </tr> </table>	Hood material	polyamide 6.6 with polyurethane coating	Visor	cellulose propionate	Neck collar	polyester and elastane	Straps	polyamide 6.6 and elastane	Exhalation valve	silicone (age-resistant)
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2.1.2	Inner half mask	The telescope-mechanism of the inner-half mask allows the hood to be packaged in a space-saving manner. It is very comfortable to wear and ensures a good fit for different head sizes and shapes. <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Half-mask</td> <td>ethylene propylene diene M-class rubber</td> </tr> </table>	Half-mask	ethylene propylene diene M-class rubber								
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2.1.3 Filter	<p>The filter housing has a round shape and consists of the filter pot and the filter cover. The filter cover has a round inlet opening, the filter pot has a round outlet opening.</p> <p>The filter bed consists of activated carbon and hopcalite. It is fixed by the housing and internal sieves.</p> <p>The particle filter with parallel fold geometry is positioned in front of the gas filtration part and is made of one part. A tight connection between the particle filter and the housing is performed by butyl glue.</p> <p>Both openings are closed by plugs, which will detach automatically when the escape hood is removed through the straps.</p> <p>Pull string polyurethane</p>
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2.2 Working principle	<p>Gases and vapours are removed from the ambient air by adsorption onto the sorbent (impregnated carbon), fire related gases and vapours, especially carbon monoxide (CO) are converted from the ambient air by the carbon catalyser (hopcalite) into CO₂ and heat. Particles are filtered by the glass fibre filter.</p> <p>The hood protects the entire head, including the eyes up to a certain extent from dust, gases, vapours, and splashes of liquid chemicals as well as heat, sparks and flames.</p> <p>It enables a clear view through the large visor.</p>
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2.3 Service life	<p>16 years in total, provided the filter is exchanged after 8 years.</p> <p>The filter exchange is easy to be done, so that the filter can be exchanged by trained personnel.</p>
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3.0 Performance Data (minimum data in accordance with EN 403:2004 / DIN 58647-7:1997 / EN 14387:2004+A1:2008)

3.1 Mechanical resistance	<p><u>Shock proofed</u> 10,000 impacts for entire device</p> <p><u>Drop test</u> 6 x 1.5m on smooth concrete surface (from different starting positions)</p> <p><u>Packaging stability</u> Firing pin test acc to EN403:2004</p> <p><u>Flame resistance</u> The unit does not contain easily flammable parts. At 800 ± 50°C the device is pulled through an open flame at 6 ± 0.5 cm/sec. – when removed from the flame, the device stops burning (self-extinguishing).</p> <p><u>Temperature changing resistance</u> Performing in the listed order: (70 ± 3) °C, rel. humidity < 20 %, (72 ± 3) h (70 ± 3) °C, rel. humidity ≥ 95 %, (72 ± 3) h (-30 ± 3) °C, (24 ± 1) h</p> <p><u>Pressure changing</u> 2 compressed air cycles with (-400 ± 10) mbar for 60 sec pressure compensation after < 20 sec. 3000 compressed air cycles with (-300 ± 10) mbar for 60 sec. pressure compensation after < 10 sec.</p>
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3.2	Particle filtration efficiency	Test Aerosols: minimum efficiency (according to EN 143:2007 (P3))	sodium chloride, paraffin oil 99,95% NaCl, 99,95% paraffin oil																																
3.3	Gas filtration capacity	Test conditions (EN 403:2004): 20x1,5 L sinus, 90 % rel. humidity, 25 °C (CO) 30 L/min, 70 % rel. humidity, 20 °C (Acrolein, HCl, HCN)																																	
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3.4	breathing resistance (in acc. with EN 403:2004)	inhalation resistance: < 8 mbar	exhalation resistance: < 3 mbar
3.5	Inside directed leakage without filter outlet (dead space volume of the hood)	< 2 % (with neck collar)	

4.0 Documentation	
4.1	<p>Markings</p> <p><u>Package:</u> date of manufacture, expire date, batch number, classification, storage condition, marking, standard number, QR code, notified body number and indication on the instruction for use. Notified body number: CE 0158</p>
4.2	<p>Instructions for use</p> <p><u>Standard Languages:</u> English, French, German, Italian, Dutch, Norwegian, Russian, Arabic</p> <p><u>Country specific Languages:</u> Brazilian Portuguese, Chinese, Danish, Finnish, Polish, Romanian, Swedish, Spanish, Czech, Turkish</p> <p><u>Print on Demand Languages:</u> Bulgarian, Estonian, Greek, Croatian, Lettish, Lithuanian, Slovak, Slovenian, Hungarian</p>

5.0 Packing & Packaging					
5.1	Package:	dimension (HxLxW) / mm	weight (approx.) / g	part name	material (main components)
		115x235x160	770	PARAT 7520, Soft Pack	Polyester/ polyurethane cellulose propionate, polyethylene
		115x249 x156	830	PARAT 7530, Hard Case	Acrylester-styrol-acrylnitrile, polycarbonate
5.2	Packaged units	One hood each			

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6.0 Accessories	<p>For carrying and fixing the PARAT Escape Hoods, Dräger offers various possibilities:</p> <p><u>Soft Pack:</u></p> <p>Waist Belt, Shoulder Strap, Belt Clip, Grip Clip</p> <p><u>Hard Case:</u></p> <p>Waist Belt, Shoulder Strap, Belt Clip, Grip Clip, D-Ring, Wallholder</p> <p><u>Training hoods:</u></p> <p>To enable a fast donning of the hoods in case of an emergency, training hoods are available. The hoods have a filter dummy and were offered in the different packagings.</p> <p><u>Videos:</u></p> <p>There is a video for every kind of packaging, which shows the donning as well as the filter replacement step by step.</p>
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7.0 User notes and limitations	<p>The performance of the filter is according to EN 14387, EN 403 and DIN EN 58647-7. The oxygen content of the ambient air must be at least 17 Vol.-% to 19.5 Vol.-%. Observe the respective national regulations.</p> <p>The storage temperature must be between -20°C and +55°C.</p> <p>The devices conform 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.</p>
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