

1.0	General Data	
1.1	Manufacturer	Dräger Safety AG & Co. KGaA, Revalstraße 1, D – 23560 Lübeck, Germany
1.2	Designation &	1. PARAT 5510, Single pack R 59 415 (EAN/GTIN: 4026056008049)
	Dräger part no.	2. PARAT 5520, Soft Pack R 59 425 (EAN/GTIN: 4026056008056)
		3. PARAT 5530, Hard Case R 59 435 (EAN/GTIN: 4026056008063)
1.3	Intended use	Fire escape / respiratory protection (incl. eye protection) against carbon monoxide, fire related gases, toxic particles 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 EN 403:2004(M)		EN 403:2004(M)
		EC type test certificate, granted by accredited and notified Certification Body DEKRA EXAM GmbH, Dinnendahlstraße 9, 44809, Bochum, Ger- many
		<b>AS/NZS 1716:2012</b> Respiratory protective devices: "Australian Standard - Certified Product" approved by SAI Global <i>(only valid for PARAT 5520 and 5530 variations, PARAT 5510 is not certified to AS/NZS 1716:2012)</i>
1.6	Further relevant standards	Environmental simulations (IP- protection category test) acc. to EN 60529
		Soft Pack: IP 5X Hard Case: IP 54
		Additionally tested against $H_2S$ according to DIN 58647-7:1997
1.7	Export approval	No classification $\rightarrow$ no sales restrictions

2.0	Design & Construction	(complete device)	
2.1	Design & material	The PARAT 5500 consi 1. hood with large visc 2. inner half-mask (inte 3. fire escape filter CC 4. different packaging	sts of: or egrated in hood) with filter assembly o-P2 options (Single Pack, Soft Pack, Hard Case)
2.1.1	Hood	The hood fits different s the signal-colour neon y elastane, seals at the ne Hood material Visor Neck collar Straps Exhalation valve	izes. The at one-side PU coated material has got rellow. The neck collar, made of polyester and eck. The large visor enables a wide field of view. polyamide 6.6 with polyurethane coating cellulose propionate polyester and elastane polyamide 6.6 and elastane silicone (age-resistant)
2.1.2	Inner half mask	The telescope-mechanic packaged in a space-sa ensures a good fit for di Half-mask	sm of the inner-half mask allows the hood to be ving manner. It is very comfortable to wear and fferent head sizes and shapes. ethylene propylene diene M-class rubber



2.1.3 Filter	The filter housing has a round shap filter cover. The filter cover has a ro round outlet opening.	be and consists of the filter pot and the bund inlet opening, the filter pot has a
	The filter bed consists of hopcalite. sieves.	It is fixed by the housing and internal
	The particle filter with ring fold geo filtration part and is made of one particle filter and the housing is per Both openings are closed by plugs cept of the Single Pack) when the opull string.	metry is positioned in front of the gas art. A tight connection between the formed by butyl glue. , which will detach automatically (ex- escape hood is removed through the
	Pull string (Soft Pack, Hard Case)	polyurethane
	Pull string (Single Pack)	cotton/ polyurethane/ stainless steel

2.2	Working principle	Fire-related gases and vapours, especially carbon monoxide (CO) are converted from the ambient air by the carbon catalyser (hopcalite) into $CO_2$ and heat. Particles are filtered by the glass fibre filter.
		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. It enables a clear view through the large visor.
2.3	Service life	16 years in total, provided the filter is exchanged after 8 years
		The filter exchange is easy to be done, so the filter can be exchanged by trained personnel.

3.0	Performance Data
	(minimum data in accordance with EN 403:2004 / DIN 58647-7:1997)



3.1	Mechanical resistance	Shock proofe 10,000 impac	<u>d</u> ts for entire device		
		<u>Drop test</u> 6 x 1.5m on s	mooth concrete sur	face (from different s	tarting positions)
		Packaging Sta Firing pin test	<u>ability</u> acc. to EN 403:200	)4	
		Flame resista	nce		
		The unit does device is pulle moved from th	not contain easily f ed through an open ne flame, the device	lammable parts. At flame at 6 ± 0.5 cm/s stops burning (self-e	800 ± 50°C the sec. – when re- extinguishing).
		Temperature	changing resistance	2	
		Performing in	the listed order:		
		(70 ± 3) °C, re	el. humidity < 20 %,	(72 ± 3) h	
		$(70 \pm 3)$ °C, re	el. humidity $\geq 95$ %,	(72 ± 3) h	
		$(-30 \pm 3)$ C, (	24 ± 1) 11		
		Pressure cha	nging	(0, 10) mbor for $(0, 2)$	
		2 compressed pressure com	pensation after < 20	$0 \pm 10$ mbar for 60 s 0 sec.	ec
		3000 compres	ssed air cycles with	(-300 ± 10) mbar for	60 sec.
		pressure com	pensation after < 10		
3.2	Particle filtration efficiency (according to EN 143:2007 (F	I est Aer 2)) minimum	osols: 1 efficiency	sodium chlori	de, paraffin oil
		at a flow	of 95 L/min	94 % NaCl, 94	4 % paraffin oil
3.3	Gas filtration capacity	Test conditions (EN 403:2004):			
		20x1,5 L sinu	us, 90 % rel. humidi	ty, 25°C (CO)	
		30 L/min, 70	% rel. humidity, 20°	°C (Acrolein,HCI, HC	N) Minimum brook
		Test Gas	Concentration / ppm	Breakthrough / ppm	through time / min
		CO	2,500 <sup>1)</sup>	200 <sup>2)</sup>	15
		Acrolein	100	0.5	15
		HCI	1,000	5	15
		HCN	400	10	15
		<sup>1)</sup> Additional tests	with 5,000, 7,500 and 1	0,000 ppm	
		<sup>2)</sup> temporal weigh	ited arithmetic mean dur	ing every 5 minutes	
		Test condition 30 L/min, 70%	ns (according to DIN 6 rel. humidity, 20°C	l 58647-7:1997): C	
		Test Gas	Concentratio ppm	n / Breakthrough	/ Minimum breakthrough time / min
		H <sub>2</sub> S	2,500	10	15
3.4	Breathing resistance (in acc. with EN 403:2004)	int < 8	nalation resistance: 8 mbar	exhalatio < 3 mbar	n resistance:



- 3.5 Inward leakage in the breathing zone excl. filter penetration < 2 % (acc. to EN 403:2004)
- 3.6 Inward leakage in the ocular zone (acc. to EN 403:2004)

< 20 %

4.0	Documentation	
4.1	Markings	<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
4.2	Instructions for use	<u>Standard Languages:</u> English, French, German, Italian, Dutch, Norwe- gian, Russian, Arabic
		<u>Country specific Languages:</u> Brazilian Portuguese, Chinese, Danish, Finnish, Polish, Romanian, Swedish, Spanish, Czech, Turkish
		<u>Print on Demand Languages:</u> Bulgarian, Estonian, Greek, Croatian, Lettish, Lithuanian, Slovak, Slovenian, Hungarian, Japanese



5.0	Packing & Pa	Packing & Packaging			
5.1	Package:	dimension (HxLxW) / mm	weight (approx.) / g	part name	material (main components)
		90x190x135	590	PARAT 5510, Single Pack	cardboard packaging
		105x215x155	660	PARAT 5520, Soft Pack	Polyester/Polyurethane, Polyethylene tereph- thalate, Polyethylene, Pol- yamide
		107x241x143	720	PARAT 5530, Hard Case	Acrylester-styrol- acryIntrile, polycarbonate
5.2	Packaged units	One hood each			

6.0	Accessories and Training	For carrying and fixing the PARAT Escape Hoods, Dräger offers various possibilities:
		Soft Pack:
		Waist Belt, Shoulder Strap, Belt Clip, Grip Clip
		Hard Case:
		Waist Belt, Shoulder Belt, Belt Clip, Grip Clip, D-Ring, Wallholder
		Training hoods:
		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.
		<u>Videos:</u>
		There is a video for every kind of packaging, which shows the donning as well as the filter replacement step by step.

# Dräger

# **Technical Data Sheet** Dräger PARAT 5500 Fire Escape Hood

7.0	User notes and limita- tions	The performance of the filter is according to EN 403. The oxygen content of the ambient air must be at least 17 Vol % to 19.5 Vol %. Observe the respective national regulations.
		The storage temperature must be between -20°C and +55°C.
		The devices conform to the minimum requirements of the standard indi- cated 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