

Core Product Data

HM1400 Half Mask

EN Requirement		Small		Medium		Large		
Weight	Actual	111 g		116 g		117 g		
Temperature Conditioning	EN	24 hrs in a dry atmosphere at 70 °C followed by 24 hrs at -30 °C						
Flammability	EN	The Half Mask is passed through a single burner, set up with a 40 mm, 800 °C flame, at a constant speed of 60mm/s at a distance of 20 mm between the burner and lowest part of the facepiece. The facepiece cannot continue to burn 5 s after removal.						
Head Harness Pull Test	EN	Withstand a pull of 50 N for 10 s						
Connectors Pull Test	EN	Withstand a pull of 50 N for 10 s						
Breathing Resistance		Inhalation Resistance				Exhalation Resistance		
		30 l/min		95 l/min		160 l/min		
	Actual	0.11 mbar		0.42 mbar		0.77 mbar		
	EN	<0.50 mbar		<1.3 mbar		<2.00 mbar		
CO ₂ Content of Inhaled Air	Actual	0.66 %		0.66 %		0.64 %		
	EN	< 1.00 %						
Inward Leakage - Based on average of the 10 subjects per exercise.		Exercise					Mean	Notes ¹ 5 Subjects achieved results < 0.001 % ² 4 Subjects achieved results < 0.001 % ³ 3 Subjects achieved results < 0.001 %
		Walk	Head side/side	Head up/down	Talk	Walk		
	Actual	0.060 % ¹	0.115 % ²	0.073 % ³	0.247 % ¹	0.210 % ¹	0.141 % ³	
	EN	< 5.000 %					< 2.000 %	

FFM1600 Full Face Mask

EN Requirement		Small		Medium		Large	
Weight	Actual	580 g		584 g		589 g	
Leak Tightness	EN	A negative pressure of 10 mbar is applied to the mask, the mask must not leak more than 1 mBar in 1 min.					
Temperature Conditioning	EN	72 hrs in a dry atmosphere at 70 °C followed by 72 hrs at 70 °C at 95-100 % relative humidity followed by 24 hrs at -30 °C					
Flammability	EN CL1	The Full Face Mask is passed through a single burner, set up with a 40 mm, 800 °C flame, at a constant speed of 60 mm/s at a distance of 20 mm between the burner and lowest part of the facepiece. The facepiece cannot continue to burn 5 s after removal.					
	EN CL2	The Full Face Mask is placed directly above 6 burners each set at a distance of 250 mm from the mask surface, the flames are set at 950 °C, the mask is held in the flame static for 5 s. Upon removal from the flame the facepiece cannot continue to burn 5 s after removal.					
Head Harness Pull Test	EN CL1	Withstand a pull of 100 N for 10 s					
	EN CL2	Withstand a pull of 150 N for 10 s					
Inhale Connectors Pull Test	EN CL1	Withstand a pull of 250 N					
	EN CL2	Withstand a pull of 500 N					
Exhale Connectors Pull Test	EN CL1	Withstand a pull of 50 N for 10 s tested 10 consecutive times					
	EN CL2	Withstand a pull of 150 N for 10 s tested 10 consecutive times					
Field of Vision	Actual	Effective 91.3 % , Overlapped 92.4 %					
	EN	Effective > 70 % , Overlapped > 80 %					
Breathing Resistance		Inhalation Resistance				Exhalation Resistance	
		30 l/min	95 l/min	160 l/min	160 l/min		
	Actual	0.12 mbar	0.43 mbar	0.77 mbar	1.85 mbar		
	EN	< 0.50 mbar	< 1.3 mbar	< 2.00 mbar	< 3.00 mbar		
		Following 300 l/min exhalation flow					
		Inhalation Resistance				Exhalation Resistance	
		30 l/min	95 l/min	160 l/min	160 l/min		
	Actual	0.11 mbar	0.40 mbar	0.80 mbar	1.74 mbar		
	EN	< 0.50 mbar	< 1.3 mbar	< 2.00 mbar	< 3.00 mbar		
		Following 80 mbar negative pressure					
		Inhalation Resistance				Exhalation Resistance	
		30 l/min	95 l/min	160 l/min	160 l/min		
	Actual	0.10 mbar	0.33 mbar	0.54 mbar	1.55 mbar		
	EN	< 0.50 mbar	< 1.3 mbar	< 2.00 mbar	< 3.00 mbar		
CO ₂ Content of Inhaled Air	Actual	0.70 %		0.75 %		0.70 %	
	EN	< 1.00 %					
Inward Leakage - Based on average of the 10 subjects per exercise.		Exercise				Notes	
		Walk	Head side/side	Head up/down	Talk	Walk	¹ 4 Subjects achieved results < 0.001 % ² 5 Subjects achieved results < 0.001 % ³ 6 Subjects achieved results < 0.001 %
	Actual	0.006 % ¹	0.006 % ²	0.006 % ³	0.007 % ²	0.004 % ²	
	EN	< 0.050 %					

F1100 Filter Range

The F1100 Filter Range - For use with both the FFM1600 and HM1400 masks										
		Particulate Only Filter	Gas Only Filter				Combined Filter			
										
EN Requirement		P3 R	A1	A2	ABE1	ABEK1	A1P3 R D	A2P3 R D	ABE1P3 R D	ABEK1P3 R D
Weight per filter pair	Actual	125 g	210 g	210 g	230 g	230 g	250 g	250 g	280 g	280 g
	EN140	< 300 g								
	EN136	< 500 g								
Pressure Drop (Measurement at 95 litres per minute)	Actual	0.9 mbar	0.9 mbar	1.2 mbar	1.0 mbar	1.0 mbar	1.7 mbar	1.9 mbar	1.8 mbar	1.8 mbar
	EN	4.2 mbar	4.0 mbar	5.6 mbar	4.0 mbar	4.0 mbar	8.2 mbar	9.8 mbar	8.2 mbar	8.2 mbar
Efficiency	Actual	> 99.99 %	NA				> 99.99 %			
	EN	> 99.95 %					> 99.95 %			
Penetration	Actual	< 0.01 %	NA				< 0.01 %			
	EN	< 0.05 %					< 0.05 %			
Cyclohexane	Actual	NA	200 min	50 min	150 min	150 min	200 min	50 min	150 min	150 min
	EN		70 min	35 min	70 min	70 min	70 min	35 min	70 min	70 min
Hydrogen Cyanide	Actual	NA			> 100 min	> 100 min	NA	NA	> 100 min	> 100 min
	EN				25 min	25 min			25 min	25 min
Hydrogen Sulphide	Actual	NA			> 100 min	> 100 min	NA	NA	> 100 min	> 100 min
	EN				40 min	40 min			40 min	40 min
Chlorine	Actual	NA			> 100 min	> 100 min	NA	NA	> 100 min	> 100 min
	EN				20 min	20 min			20 min	20 min
Sulphur Dioxide	Actual	NA			65 min	50 min	NA	NA	65 min	50 min
	EN				20 min	20 min			20 min	20 min
Ammonia	Actual	NA				90 min	NA			90 min
	EN					50 min				50 min
Viral Filtration Efficiency (VFE)	Actual	> 99.9999 %	NA				> 99.9999 %			

Filter usage at a glance										
										
		P3 R	A1	A2	ABE1	ABEK1	A1P3 R D	A2P3 R D	ABE1P3 R D	ABEK1P3 R D
Organic vapours	A	NA	✓	✓	✓	✓	✓	✓	✓	✓
Inorganic vapours	B	NA			✓	✓	NA		✓	✓
Acidic vapours	E	NA			✓	✓	NA		✓	✓
Ammonia vapours	K	NA				✓	NA			
Nuisance odours		NA	✓	✓	✓	✓	✓	✓	✓	✓
Dusts	P	✓	NA				✓	✓	✓	✓
Mists		✓	NA				✓	✓	✓	✓
Viruses such as COVID-19		✓	NA				✓	✓	✓	✓
Water based painting		✓	NA				✓	✓	✓	✓
Solvent based brush painting		NA	✓	✓	✓	✓	✓	✓	✓	✓
Rubbing down paint		✓	NA				✓	✓	✓	✓
Paint stripping, chemical or heat		NA				✓	✓	✓	✓	✓
White spirit		NA	✓	✓	✓	✓	✓	✓	✓	✓
Chlorine (cleaning & pools)		NA			✓	✓	NA		✓	✓
Glyphosate (weed killer)		✓	NA				✓	✓	✓	✓
Brick acid (graffiti removal)		NA			✓	✓	NA		✓	✓
Formaldehyde		NA			✓	✓	NA		✓	✓
Fibres & fibre glass		✓	NA				✓	✓	✓	✓
Plaster		✓	NA				✓	✓	✓	✓
Silica (concrete/stone cutting)		✓	NA				✓	✓	✓	✓
Woods (hard & soft)		✓	NA				✓	✓	✓	✓
MDF (machine tooling)		✓	NA				✓	✓	✓	✓
Welding (ferrous & lead)		✓	NA				✓	✓	✓	✓
Earth moving (contaminated)		NA				NA	✓			

WEL or Workplace Exposure Level - This table is for guidance purposes only. A proper risk assessment by qualified personnel should be carried out before selecting an appropriate filter cartridge.

