

FM51

COMBAT VEHICLE MASK



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FM50

The FM50 offers a new dimension in respirator design, comfort and protection as it is based on the Joint Services General Purpose Mask (JSGPM) chosen for the US armed forces. A twin filter conformal system sits close against the face, providing the wearer with high protection and low breathing resistance and also allowing for greater ease of weapon deployment.

Outstanding vision is provided with the introduction of Avon's new wide panoramic flexible visor which is the result of our new bonding technology that incorporates both visual clarity and integral durability.



FM51

The FM51 is a variation of the latest generation Avon FM50 mask but designed specifically to provide combat vehicle operators with respiratory and communications system interface.

Unique Visor Technology

- Unique polyurethane visor is highly flexible plus scratch and impact resistant
- Optically correct across the whole field of view
- Panoramic visor design gives excellent field of vision and wearer recognition while enhancing compatibility with weapon sights
- The Vision Correction System allows prescription lenses to be mounted inside the mask
- Clear / Sunlight / Blue Blocker and Laser outserts available for all conditions

FM51



- Heat build up minimized
- Low inhalation resistance
- Low re-breathed carbon dioxide
- Air circulation for cooling & demisting

Air Flow Management



User Benefits

- Available in 3 sizes (S,M,L)
- Chlorobutyl rubber silicone blend giving the mask a high degree of flexibility and comfort for extended use
- Unique twin low profile conformal filters
- Unique head harness eliminates pressure points for a more comfortable fit
- High flow fail safe drinking device enables connection to a canteen or bladder type system
- The Gore Chempak™ hood provides head and neck protection against liquid and airborne contaminants
- Hood available in two sizes is integrated to mask
- Minimal replacement parts for simple maintenance

Communications

- Provides clear communication while wearing mask
- Integrated Electronic Communication Port (ECP) allows for direct connection to vehicle radio system through low-profile communication lead
- Additional Voice Projection Unit (VPU) can be attached via the ECP for enhanced non-radio communication

Filtration

- Twin filter design significantly reduces breathing resistance and improves weight distribution
- Hose assembly provides interface to vehicle air supply with quick release feature for rapid exit
- Conformal filter technology improves integration with equipment

FM51 Mask Specifications

CBRN Agent Resistance		FM51 Performance	Breathing Performance		
Mustard (H) Sarin (GB) Soman (GD) VX		Greater than 36 Hrs	Re-breathed CO ₂	0.8%	
Laboratory Protection Factory Performance (Sodium Chloride)		Greater than 10,000	Inhalation Resistance at: (with FM61 filters fitted) 30 L/Min 95 L/Min 160 L/Min	Mask Only: 2 mm WG 8 mm WG 12 mm WG	Mask & Filters: 10 mm WG 30 mm WG 64 mm WG
			Exhalation Resistance at: 85 L/Min 160 L/Min	7 mm WG 12 mm WG	
Weight			Field of View		
FM51 mask (including twin filters)		860g (1.9lbs)	Visual Field Score – NIOSH CBRN APR Standard		96
FM51 mask (including twin filters, vehicle hose, protective hood and comms lead)		1270g (2.8lbs)			

FM51 Filter Performance

a. Nerve Agents	b. Blister Agents	c. Blood Agents	d. Riot Control Agents
"G" Series	Mustard/Sarin (GB)	Hydrogen Cyanide	CS
"V" Series	Lewisite	Cyanogen Chloride	CN
Any thickened form of agent	Any thickened form of agent	Chloropicrin	OC (Pepper Spray)

NIOSH CBRN Test Agent	Typical Performance	NIOSH CBRN Cap 1 Requirement
Cyclohexane	>20 mins	15 mins
Hydrogen Cyanide (AC)	>45 mins	15 mins
Cyanogen Chloride (CK)	>45 mins	15 mins
Phosgene	>100 mins	15 mins

The FM51 respirator falls within the definition of Significant Military Equipment in the United States Munitions List, International Traffic in Arms Regulations and may only be supplied outside of the United States of America to customers who are licensed by the US Department of State, Directorate of Defense Trade Controls.