FM50th

THE FIRST CHOICE FOR DEFENCE













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FM50 is the latest generation CBRN full face mask specifically designed to meet the latest NATO forces military mask requirements. Developed to counter the multiple CBRN threats encountered in modern war fighting, anti-terrorist and peace-keeping operations, the FM50 brings a whole new dimension to respirator design, comfort and protection.

IDEAL FOR:

- **■** Battlefield CBRN protection
- **■** Counter terrorism operations
- Specialist operations
- Critical national infastructure protection

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UNIQUE VISOR TECHNOLOGY

- Unique polyurethane visor is highly flexible plus scratch and impact resistant.
- Fully optically correct.
- Panoramic visor design gives maximum field of vision and wearer recognition.

COMMUNICATIONS

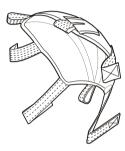
- Electronic Communication Port (ECP) allows a Voice Projection Unit (VPU) to be safely connected in a CBRN environment to an internal microphone.
- Additional communication systems can be attached via this ECP using an appropriate lead.





USER COMFORT

- Available in 3 sizes.
- Chlorobutyl rubber and silicone blend giving the mask a high degree of flexibility and comfort for extended use.
- Unique twin conformal low profile filters.
- 6 point skull cap head harness with low profile pre-adjusted brow straps.



- Reflex seal with low profile brow for helmet compatibility.
- Extended chin flap for CBRN garment compatibility.
- High flow fail safe drinking device enables connection to a canteen or bladder type system.

FILTRATION

- Twin filter design significantly reduces breathing resistance and improves weight distribution.
- Bayonet fit provides quick and efficient filter attachment.
- Filters can be replaced without breaking the protective seal through self sealing valves.



ACCESSORIES

VISION

- Clear outserts for extreme environments.
- Blueblocker outsert delivers sharper images by filtering out specific light wavelengths.
- Sunlight outserts for high intensity light situations.
- Laser outserts for protection against specific wavelengths.
- Vision correction assembly allows prescription lenses to be mounted inside the mask.

MASK HOODS

- A fully integrated, lightweight protective hood is available in 2 sizes:
 - Manufactured from the latest materials, providing full head and neck protection.
 - 24 hours protection against agent permeation.
 - Flame retardant and tested to 800°C.
 - Simple to install and remove.

COMMUNICATION

- Voice Projection Units for voice amplification.
- Range of earpieces and headsets including bone conduction devices.
- Push to talk options.
- Sizing Gauge.

STORAGE & CARRIERS

- Range of mask carriers.
- Military canteen or bladder type systems for hydration.



Clear Outsert



Blueblocker Outsert



Sunlight Outsert



Vision Correction Assembly



Tactical Hood



Voice Projection Unit and Microphone Assembly



Universal Carrier



FM50 Technical Data

The FM50 has been designed to be compliant with the latest US and NATO military CBRN requirements. The following data gives a good indication of its performance.

Mask Performance		Breathing Performance		
CBRN Agent Resistance	FM50 Performance	Re-breathed CO ₂	0.8%	
Mustard (H) / Sarin (GB) Soman (GD) / VX	Greater than 36 Hrs	Inhalation Resistance at: 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
Laboratory Protection Factory Performance (Sodium Chloride)	Greater than 10,000	Exhalation resistance at: 85 L/Min 160 L/Min	7 mm WG 12 mm WG	
Weight		Field of View		
FM50 mask (including twin filters)	840 grams	Visual Field Score – NIOSH CBRN APR Standard	96	
FM50 Mask Assembly		FM50 Mask System Includes: Mask Assembly, Primary Filters (Pair), Clear Outsert, Operator Manual, Mask Carrier (Black)		
Description	Part Number	Description	Part Number	
FM50 Mask Assembly LGE	71400/1	FM50 Mask System LGE	71450/1	
FM50 Mask Assembly MED	71400/2	FM50 Mask System MED	71450/2	
FM50 Mask Assembly SML	71400/3	FM50 Mask System SML	71450/3	

FM50 Filter Performance

The FM50 filter canister protects the wearer against all chemical and biological agents in aerosol, liquid and vapour form including:

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

Typical filter performance comapared to NIOSH CBRN Cap 1 requirements:

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

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