FM54™
SINGLE MASK, MAXIMUM FLEXIBILITY
AIR PURIFYING RESPIRATOR
AVON PROTECTION
The Avon fire hardened FM54 Air Purifying Respirator provides Specialist Operators maximum level of protection to the face, eyes and respiratory tract from Chemical Biological, Radiological and Nuclear (CBRN), Riot Agents, Toxic Industrial Chemicals (TICS) and Toxic Industrial Materials while maintaining extreme user flexibility as mission profiles change.

**Applications**
- Special Response Teams
- Law Enforcement
- Clandestine Drug Lab
- Entry & Remediation
- Bomb Squads
- First Responders
- SWAT/ERT Teams
- Civil Support Teams
- Chemical Spill Cleanup
- Bio Identification & Clean Up

**Key Features**
- The flexible, panoramic single lens visor minimizes visual stress and provides best in class field of view and compatibility with weapons sights and night vision equipment while providing ballistic protection and scratch resistance.
- Vision correction assembly for prescription lenses.
- Fail safe, high flow hydration system.
- 6 point fire hardened skull cap head harness with low profile pre-adjusted brow straps.
- A full range of filters are available to meet the variety of needs that the FM54 can address.
- Ruggedized integrated mode selector.

**Standard 40mm EN148-1 compliant thread**
**OPERATOR COMFORT**

- Available in four sizes to accommodate all operators
- Comfortable reflex seal with low profile brow for superior helmet compatibility
- Interchangeable silicone nosecups for custom fit

**VISION**

Full range of removable outserts are available to provide additional ballistic protection and comfortable operation

- CLEAR
- MIRRORED
- SUNLIGHT
- SHADE 5 BREACHING
- BLUEBLOCKER
- LASER

**COMMUNICATIONS**

- Optional low profile, voice projection unit with internal microphone
- Provides clear communication while wearing mask
- Electronic pass-through for external radio use

**SPECIALIST MASK**

- The unique chlorobutyl/silicone blend face piece material ensures the mask is not only high in protection but also provides a better seal and is more comfortable to wear for extended periods
- Flexible face piece provides superior cheek-to-stock weld for weapons integration
- FM54 functions in both negative and positive pressure modes (APR, SCBA and PAPR)
- Reduced buckle size for suit/helmet integration

- Second-skin hood/mask interface allows mask to integrate with the Gore Chempak™ material protective hood
- Enhanced, robust lever located on VREU (Variable Resistance Exhalation Unit), switches mode from positive to negative pressure without removal of optional VPU (Voice Projection Unit) or loss of protection
### CBRN Agent Resistance

<table>
<thead>
<tr>
<th>Requirement</th>
<th>FM54 Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 hours</td>
<td>&gt;36 hours</td>
</tr>
</tbody>
</table>

- Mustard Vapour (HD)
- Mustard Liquid (HD)
- Sarin (GB)

### Laboratory protection factor performance (sodium chloride)

<table>
<thead>
<tr>
<th>Requirement</th>
<th>FM54 Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,000</td>
<td>&gt;10,000</td>
</tr>
</tbody>
</table>

### Re-breathed CO₂

- <1%

### Inhalation Resistance

<table>
<thead>
<tr>
<th>Flow Rate</th>
<th>Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 L/Min</td>
<td>&lt;5 mm WG</td>
</tr>
<tr>
<td>95 L/Min</td>
<td>&lt;12 mm WG</td>
</tr>
<tr>
<td>160 L/Min</td>
<td>&lt;23 mm WG</td>
</tr>
</tbody>
</table>

### Exhalation Resistance negative pressure mode

<table>
<thead>
<tr>
<th>Flow Rate</th>
<th>Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>85 L/Min</td>
<td>&lt;8 mm WG</td>
</tr>
<tr>
<td>160 L/Min</td>
<td>&lt;12 mm WG</td>
</tr>
</tbody>
</table>

### Weight

- FM54 mask (excluding filter): <0.65 kg (1.43lbs)

### Field of View

- Visual Field Score (NIOSH CBRN Standard): 96

### Materials Used

- FM54 Mask: Chlorobutyl / Silicone rubber & Polyurethane

### Hydration

- Drinking Flow Rate: 230 mL/min

### Filter Applications

<table>
<thead>
<tr>
<th>Filter</th>
<th>Part Number</th>
<th>Classification</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSCF50</td>
<td>72601/71/4</td>
<td>Riot Control</td>
<td>All particulate hazards including dust, fume, bacteria and virus, plus riot agent CS (meets 8 hour NIO SH test standards) and CN (&lt; 1 hour against NIOSH test standards).</td>
</tr>
<tr>
<td>CTCF50</td>
<td>72606/3</td>
<td>Riot Control</td>
<td>Specifically designed for removal of riot control agents and tear gases including CS, CN and OC pepper spray.</td>
</tr>
<tr>
<td>GPCF50</td>
<td>72601/70/2</td>
<td>NATO CBRN</td>
<td>Chemical, biological and radiological warfare agents in accordance with NATO requirements. Also certain toxic industrial chemicals such as chlorine, hydrogen, sulphide, sulphur dioxide and organic vapours with a boiling point of above 65°C.</td>
</tr>
<tr>
<td>MILCF50</td>
<td>72604/3</td>
<td>NATO CBRN</td>
<td>CBRN filter canister designed to meet the relevant criteria specified in the NIOSH CBRN APR standard at the 15-minute classification level (CAP I). The EUROPEAN STANDARD, EN 14387 (A1B2E1K1P3), and chemical and biological warfare agents in aerosols, liquid and vapour form.</td>
</tr>
<tr>
<td>CBRNF12CE</td>
<td>70010/23/1</td>
<td>CE Approved</td>
<td>Dual classification filter for CBRN and industrial use. Meets the requirements of EN14387 (A1, B2, E1, K1 and P3), NIOSH CBRN APR standard cap 1, and NATO requirements against CWA agents including Hydrogen Cyanide (AC), Cyanogen Chloride (CK), Sarin (GB) and Mustard (HD).</td>
</tr>
</tbody>
</table>

### FM54 Twin Port Mask (CE Certified)

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>FM54 CE Mask Twin Port XS</td>
<td>72850/9</td>
</tr>
<tr>
<td>FM54 CE Mask Twin Port SML</td>
<td>72850/10</td>
</tr>
<tr>
<td>FM54 CE Mask Twin Port MED</td>
<td>72850/11</td>
</tr>
<tr>
<td>FM54 CE Mask Twin Port LRG</td>
<td>72850/12</td>
</tr>
</tbody>
</table>

Type-examination approval: PPE Regulation 2016/425/EU - Module B: Certificate CE 684839.