The M53 respirator falls within the definition of Significant Military Equipment in the United States Munitions List, International Traffic in Arms Regulations. It is made in America 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.

**Materials used**

- Chlorobutyl/Silicone Rubber
- Flexible Polyurethane
- Prescription Lenses

**Visual Field Score**

- NIOSH CBRN Standard 96

**Operational Flexibility**

- Right- or left-handed
- Available in 4 sizes and 2 colors
- New reflex seal
- 6 point skull cap

**Protection and Comfort**

- Interchangeable silicone nosecup for custom fit
- Interchangeable cheek pieces for a snug fit
- Interchangeable prescription lenses
- Interchangeable eye lenses for comfort
- Interchangeable Temple straps
- Interchangeable cheek-to-shoulder harness

**Key Features**

- Fail-safe, high-visibility yellow exhalation valve
- Universal exhalation valve
- Vision correction
- VCA (valve cassette assembly) provides enhanced protection and comfort
- ECP (electronic communications port) for radio and voice amplification interface
- BPR (breathing protection system) provides fail-safe protection
- Interchangeable NBC (nuclear, biological, chemical) filter configuration

**Filtration**

- NBC filter configuration
- Particulate and CS/CN (chemical, biological, nuclear, and radiological) filter configuration

**Filtration Ratings**

- Greater than 10,000 laboratory protection factor performance (sodium chloride)
- Greater than 24 Hours
- Inorganic acid gas (AG)
- Phosgene (CO)
- Vapors (V)
- Mustard (H)
- Soman (GD)
- VX

**Performance**

- Inhalation resistance at different flow rates and pressure modes:
  - 160 l/min 32 mm WG
  - 85 l/min 15 mm WG

**Exhalation Resistance**

- Positive pressure mode: 40 mm WG
- Negative pressure mode: 40 mm WG

**Construction**

- The unique chlorobutyl/silicone blend face piece material ensures the mask is lightweight yet durable
- The flexible, scratch-resistant panoramic eyelens provides ballistic protection and extreme environments
- Vision correction
- Ballistic helmets and goggles compatibility with communication gear

**Functionality**

- The 53-Series mask is operational in the following modes:
  - SCBA (Self Contained Breathing Apparatus)
  - APR (Air Purifying Respirator)
  - CCBA (Closed Circuit Breathing Apparatus)
  - PAPR (Powered Air Purifying Respirator)

**Accessories**

- Additional outserts are available for extended use
- A clear outsert is also available on the market

**Additional Features**

- The harness and head harness with buckles provide comfort and fit
- The valve cassette assembly offers enhanced ballistic protection as well as protection and comfort
- The system connects to canteens and communication gear

**Applications**

- The M53 Series Protective Mask was specifically developed to meet the unique requirements of Special Operations Units. It was developed as a result of the JSGPM (Joint Services General Protective Mask) Program, the SCBA (Self Contained Breathing Apparatus) capability is provided.
Based on the US Government M50/JSGPM (Joint Services General Purpose Mask) Program, the 53-Series Protective Mask was specifically developed to meet the unique requirements of Special Operations Units. The 53-Series Protective Mask was developed to counter the multiple threats encountered on the modern battlefield, war on terrorism and peace keeping operations around the world. It provides excellent protection against traditional chemical and biological warfare agents, select Toxic Industrial Materials (TIMs) and particulate matter including radioactive dust.

The M53 will function as a conventional negative pressure mask as well as with a range of SCBA (Self Contained Breathing Apparatus) and PAPR (Powered Air Purifying Respirator). This is achieved without the need to remove or change any components. CCBA (Closed Circuit Breathing Apparatus) capability is provided with an exhalation valve adapter.

The 53-Series mask is operational in the following modes:

- APR (Air Purify Respirator) - A negative pressure mask using NATO thread filters
- SCBA (Self Contained Breathing Apparatus)
- PAPR (Powered Air Purifying Respirator)
- CCBA (Closed Circuit Breathing Apparatus)
- Combination SCBA and PAPR Apparatus

Key Features

- The flexible, panoramic eyelens minimizes visual stress and maximizes field of view; provides ballistic protection and scratch resistance
- Vision correction assembly for prescription lenses
- 6 point skull cap head harness with low profile pre-adjusted brow and temple straps
- Fail safe, high flow hydration system connects to hydration bladders and canteens

One Mask, All Missions.

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 polyurethane lens minimizes eye stress and maximizes field of view
- The lens provides improved ballistic protection as well as excellent scratch resistance
- Additional outserts are available to provide sunlight and laser protection
- A clear outsert is also offered for additional scratch protection in extreme environments and blue blocker to reduce haze while also improving overall ballistic protection
- The harness and buckles provide improved comfort and compatibility with ballistic helmets and communication gear
- New reflex seal provides high levels of protection and comfort
- Available in 4 sizes and interchangeable silicone nosecup for custom fit
- Right- or left-handed which provides the best cheek-to-stock weld available on the market

Operator Protection and Comfort

- Equipped with a standard Electronic Communications Port (ECP) for radio and voice amplification interface
- Internal microphone assembly offers enhanced speech performance
- Low profile, exterior mounted amplifier is available for inter-team communication
- 2-pin pass-through allows for simple integration with a variety of off-the-shelf communications devices

Filtration

Communications

- The flexible, panoramic eyelens minimizes visual stress and maximizes field of view; provides ballistic protection and scratch resistance
- Vision correction assembly for prescription lenses
- 6 point skull cap head harness with low profile pre-adjusted brow and temple straps

Operational Flexibility

- The most operationally flexible mask
- The Valve Cassette Assembly (VCA) provides the unique capability to use the 53-Series Protective Mask with a variety of PPE (Personal Protective Equipment) without the need to remove or change any components.
The 53-Series Protective Mask was specifically developed to meet the unique requirements of Special Operations Units. The 53-Series was developed to counter the multiple threats encountered on the modern battlefield, war on terrorism and peacekeeping operations around the world. It provides excellent protection against traditional chemical and biological warfare agents, select Toxic Industrial Materials (TIMs) and particulate matter including radioactive dust.

The M53 will function as a conventional negative pressure mask as well as with a range of SCBA (Self Contained Breathing Apparatus) and PAPR (Powered Air Purifying Respirator). This is achieved without the need to remove or change any components.

CCBA (Closed Circuit Breathing Apparatus) capability is provided with an exhalation valve adapter.

**Operator Protection and Comfort**

- 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.
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**Filtration**

- **M53**+General Purpose NBC filter configuration
- **M53**+Particulate Particulate and CS/CN Protection

**Communications**

- The flexible, panoramic eyelens minimizes visual stress and maximizes field of view; provides ballistic protection and scratch resistance.
- Vision correction assembly for prescription lenses.
- 6 point skull cap head harness with low profile pre-adjusted brow and temple straps.
- Fail safe, high flow hydration system connects to hydration bladders and canteens.

**ONE MASK, ALL MISSIONS.**
# M53 Mask Specifications

## CBRN Agent Resistance

<table>
<thead>
<tr>
<th>CBRN Agent Resistance</th>
<th>Mustard (H)</th>
<th>Sarin (GB)</th>
<th>Soman (GD)</th>
<th>VX</th>
<th>Laboratory Protection Factor performance (Sodium chloride)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Greater than 24 Hours</td>
<td></td>
<td></td>
<td></td>
<td>Greater than 10,000</td>
</tr>
</tbody>
</table>

## Breathing Performance (excluding filter)

<table>
<thead>
<tr>
<th>Breathing Performance (excluding filter)</th>
<th>Re-breathing CO₂</th>
<th>Inhalation Resistance at:</th>
<th>Exhalation resistance negative pressure mode:</th>
<th>Exhalation resistance positive pressure mode:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.8%</td>
<td>85 l/Min</td>
<td>85 l/min</td>
<td>85 l/min</td>
</tr>
<tr>
<td></td>
<td></td>
<td>160 l/min</td>
<td>160 l/min</td>
<td>160 l/min</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 mm WG</td>
<td>15 mm WG</td>
<td>15 mm WG</td>
</tr>
<tr>
<td></td>
<td></td>
<td>32 mm WG</td>
<td>30 mm WG</td>
<td>40 mm WG</td>
</tr>
</tbody>
</table>

## Weight

<table>
<thead>
<tr>
<th>Weight</th>
<th>M53 mask (excluding filter)</th>
<th>1.6 lbs.</th>
</tr>
</thead>
</table>

## Field of view

<table>
<thead>
<tr>
<th>Field of view</th>
<th>Visual field Score - NIOSH CBRN standard</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>96</td>
</tr>
</tbody>
</table>

## Materials used

<table>
<thead>
<tr>
<th>Materials used</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>M53 Mask Visor</td>
<td>Flexible polyurethane</td>
</tr>
<tr>
<td>M53 Mask Facepiece</td>
<td>Chlorobutyl/Silicone Rubber</td>
</tr>
</tbody>
</table>

## Hydration

<table>
<thead>
<tr>
<th>Hydration</th>
<th>Drinking Flow Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&gt;230 ml/min</td>
</tr>
</tbody>
</table>

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