Protection that works as hard as you do.
Comfort options that work for you.

Whenever there’s a dirty, dusty job to be done, a comfortable respirator can help to make your workers want to wear it and promote compliance as required at all times during exposure to hazardous or unhealthy conditions.

There are options to protect against airborne particles and mists that can affect your workers’ health. 3M offers a wide selection of NIOSH-approved filtering facepiece respirators for numerous work-related tasks. Whether it’s sweeping, sanding, grinding, sawing, bagging or welding, 3M provides a variety of innovative technologies and features – all designed to provide comfort, convenience and value.

- Lightweight and comfortable
- Adjustable noseclips to help provide a custom seal
- Variety of strap types and attachments
- Some available with carbon filter material for nuisance level gas/vapor relief
- Compatible with certain eye protection

Get more face time.

A respirator can’t give workers all the protection it was designed to provide, unless it is selected and worn correctly during all periods of exposure. That’s why 3M uses a variety of innovative technologies and features designed to enhance user comfort and help increase wear time.

Disposable respirators require a good seal between the respirator and face to deliver the expected protection. To obtain a good seal, always follow all directions provided with each respirator model.

Important

All 3M Filtering Facepieces are NIOSH- approved respirators. Before using, you must determine the following:

1. The types of contaminants for which the respirator is being selected, and exposure time.
2. The concentration level of the contaminant(s). Do not use for particle concentrations that exceed 10 times the OSHA PEL or applicable occupational exposure limit, whichever is lower.
3. Whether the respirator can be properly fitted to the wearer’s face. Do not use with beards, or other conditions that prevent a good seal between the face and the sealing surface of the respirator.
4. Before required use of filtering facepiece respirators, a written respiratory protection program must be implemented, meeting all the requirements of OSHA 29 CFR 1910.134 including medical evaluation, training, and fit testing.

Particulate filter types

NIOSH-approved filters are rated as N95, R95, P95, N99, R99, P99, N100, R100 or P100. The number 95, 99, or 100 (99.97%) indicates the percent NIOSH filtration efficiency.

<table>
<thead>
<tr>
<th>Series</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Series</td>
<td>Used in particulate environments free of oil aerosols.</td>
</tr>
<tr>
<td>R Series</td>
<td>Used for oil and non-oil particles with time use limitations specified by NIOSH.</td>
</tr>
<tr>
<td>P Series</td>
<td>Used for oil and non-oil particles with time use limitations specified by manufacturer.</td>
</tr>
</tbody>
</table>

Per user instructions, the respirator needs to be correctly positioned on your face and head:

- Upper strap should be positioned on the crown of the head.
- Lower strap should be positioned below the ears.
- Noseclip should be completely molded to the shape of the nose using two hands.
- Always conduct a user seal check.
- Always follow the appropriate user and donning instructions for the specific model.

1 3M recommended for relief against nuisance level acid gas or organic vapors. Nuisance levels are less than OSHA PEL or applicable government occupational exposure limits, whichever is lower.
What type of particles are in your environment?

### Oil and Non-Oil R- or P-Series Respirators

- **Is a P100 respirator required or preferred?**
  - YES: 8293
  - NO: 8233

- **Is the environment hot and humid or is additional worker comfort desired?**
  - NO: 8200
  - YES: 8246

- **Is nuisance level OV/AG reduction preferred?**
  - NO: 8240
  - YES: 8271

### Non-Oil N-Series Respirators

- **Is this a welding application or is a N100 respirator required or preferred?**
  - YES: N100

- **Is the environment hot and humid or is additional worker comfort desired?**
  - NO: 8233
  - YES: WELDING

#### Welding

- **Is ozone* or nuisance level OV reduction preferred?**
  - NO: 8210
  - YES: 9210+

- **Is a folded product preferred?**
  - NO: 8110S
  - YES: 9105

- **Is a face seal preferred?**
  - NO: 8200
  - YES: 9211+

- **Is nuisance level AG reduction preferred?**
  - YES: 8211

- **Is a face seal preferred?**
  - YES: 8516
  - NO: 8511

### Notes

*SM recommended for ozone protection up to 10X OSHA PEL. Not NIOSH approved for ozone.

**SM recommended for relief against nuisance level acid gas (AG) or organic vapors (OV).

Nuisance levels are less than OSHA PEL or applicable government occupational exposure limits, whichever is lower.
Everyday value. All-day comfort

Reliable, value-priced protection against a wide range of non-oily particles. Engineered to provide 95% NIOSH filtration efficiency.

Unvalved N95 Respirators

**8210 (N95)**
Breathe easier! Advanced Electrostatic Media technology enhances particulate capture while reducing breathing resistance. Designed with welded strap attachment for greater durability, soft nose foam, for more comfort and adjustable noseclip to help ensure a secure custom seal.

**8210 Plus (N95) AAD #07048**
All the features that make the 8210 one of the most widely used disposable respirators in the industry – with the addition of comfortable braided headbands and staple-free attachment.

**8110S (N95)**
Similar to 8210, but sized for people with smaller faces.

**9210+ (N95) AAD #37192**
A breakthrough in comfort and convenience. This innovatively designed three-panel respirator helps deliver comfortable, reliable worker protection against non-oil based particles.

**8200 (N95) AAD #07023**
Economy without compromise. Includes many of the same features as the 8210.

**9105 & 9105S (N95)**
The economical 3M™ VFlex™ Particulate Respirator’s proprietary V-shaped pleats help make breathing easier, expand to provide a comfortable seal, and flex with mouth movement for easier talking. Available in two sizes.

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**IMPORTANT:** All 3M products shown in this catalog must be used in accordance with the OSHA regulations and the user instructions, warnings, and limitations accompanying each product.
A breath of fresh air.

These respirators all feature the proprietary 3M™ Cool Flow™ Exhalation Valve – designed to release hot, humid exhaled breath quickly, helping to reduce heat build-up and moisture inside the facepiece.

N95 Respirators

8511 (N95)  AAD #07185

Stays cooler!* Our most popular valved model is suited for hot, humid environments, or for long periods of wear.

* Compared to non-valve disposable respirators.

8211 (N95)

All the great features of the 8511, plus a comfortable foam face seal. Its design helps protect against certain non-oil based particles.

8293 (P100)

For those who want NIOSH’s highest-rated filtration efficiency in a disposable respirator, this provides a minimum filter efficiency of 99.97% against oil-based particles.

8233 (N100)

For those who want NIOSH’s highest-rated filtration efficiency in a disposable respirator, this provides a minimum filter efficiency of 99.97% against non-oil based particles.

9211+ (N95)  AAD #37193

Comfort meets convenience. Three-panel respirator that’s suited for work situations involving heat, humidity, or long periods of wear.

8210V (N95)

An economical option when a valved respirator is desired, this respirator is based on the popular 8210 and features the proprietary 3M™ Cool Flow™ Valve.

100 Class Respirators

Typically used for certain OSHA substance specific contaminants (excluding asbestos but including lead, MDA, arsenic, and cadmium); and pharmaceutical manufacturing.

8293 (P100)

Individually packaged

8233 (N100)

Individually packaged

9211+ (N95)  AAD #37193

Individually packaged

IMPORTANT: All 3M products shown in this catalog must be used in accordance with the OSHA regulations and the user instructions, warnings, and limitations accompanying each product.

Featured Technologies

3M’s technological benefits help you match the right respirator to your environment. Use this color code to identify which features are included on each respirator.
Filter out metal fumes
Welding and metal pouring respirators all feature the proprietary 3M™ Cool Flow™ Exhalation Valve.

N95 Respirators

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>8214 (N95)</td>
<td>A respirator designed for applications where metal fumes are present, including those with ozone* and nuisance level organic vapors.** Plus a comfortable foam faceseal.</td>
<td>Welding, particularly with stainless, galvanized and aluminum, metal pouring.</td>
</tr>
<tr>
<td>8212 (N95)</td>
<td>Long-lasting comfort in tough environments. Features include welding web, cake-resistant filter media, nose foam, adjustable noseclip, and buckle straps. Plus a comfortable foam faceseal</td>
<td>Welding, metal pouring.</td>
</tr>
<tr>
<td>8514 (N95)</td>
<td>A respirator designed for applications where metal fumes are present, including those with ozone* and nuisance level organic vapors.**</td>
<td>Welding, particularly with stainless, galvanized and aluminum and metal pouring.</td>
</tr>
<tr>
<td>8512 (N95)</td>
<td>Long-lasting comfort in tough environments. Features include welding web, cake-resistant filter media, nose foam, adjustable noseclip, and buckle straps.</td>
<td>Welding, metal pouring.</td>
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<tr>
<td>8515 (N95)</td>
<td>An economical option for welders. Features welding web, adjustable M-Noseclip, and braided headbands to help provide a custom and secure seal.</td>
<td>Welding, metal pouring.</td>
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<tr>
<td>8516 (N95)</td>
<td>Designed specifically for metal pouring applications in the aluminum industry. Helps protect against certain non-oil based particles, including those with nuisance levels of acid gases** such as sulphur dioxide, hydrogen fluoride, and/or chlorine.</td>
<td>Metal pouring.</td>
</tr>
</tbody>
</table>

IMPORTANT: All 3M products shown in this catalog must be used in accordance with the OSHA regulations and the user instructions, warnings, and limitations accompanying each product.
Specialized solutions for harsh environments.

### R95 Respirators
R series are resistant to oil mist.

- **8247 (R95) AAD #07186**
  - Helps provide comfortable protection against certain oil and non-oil based particles – including those with nuisance levels of organic vapors**, such as solvents, degreasers, and resins.
  - Potential Applications: Foundry operations, lab settings, agriculture, petrochemical manufacturing and undercoating where particles and nuisance levels of organic vapors may be present.

- **8246 (R95)**
  - Helps protect against certain oil and non-oil based particles – including those with nuisance levels of acid gases**, such as sulphur dioxide, hydrogen fluoride, and/or chlorine.
  - Potential Applications: Glass etching, chemical processing paper processing, aluminum smelting and brewing operations where particles and nuisance levels of acid gases may be present.

- **8240 (R95)**
  - Helps protect against certain oil and non-oil based particles. Features a collapse-resistant shell for increased durability.
  - Potential Applications: Grinding, sanding, sweeping, machining and other dust producing/oily operations.

### P95 Respirators
P series respirators are oil-resistant and can be used wherever protection in oil environments is needed.

- **8577 (P95)**
  - Helps provide comfortable, reliable worker protection against certain oil and non-oil based particles – including those with nuisance levels of organic vapors**, such as solvents, degreasers, and resins.
  - Potential Applications: Glass etching, chemical processing, paper processing, aluminum smelting and brewing operations.

- **8576 (P95)**
  - Helps provide comfortable, reliable worker protection against certain oil and non-oil based particles – including those with nuisance levels of acid gases**, such as sulphur dioxide, hydrogen fluoride, and/or chlorine.
  - Potential Applications: Glass etching, chemical processing, paper processing, aluminum smelting and brewing operations.

- **8271 (P95)**
  - Helps protect against certain oil and non-oil based particles.
  - Potential Applications: Grinding, sanding, sweeping, machining and other dust producing/oily operations.

**IMPORTANT:** All 3M products shown in this catalog must be used in accordance with the OSHA regulations and the user instructions, warnings, and limitations accompanying each product.

- **Adjustable Buckle Straps**
  - Get a comfortable, secure seal fast, with a single tug.
- **Welding Web**
  - Unique filter media incorporating protective layers designed to be flame resistant as demonstrated per ASTM D2859-96. (Not a substitute for a faceshield.)
- **Carbon Filter Material**
  - Greater comfort, more relief from odors, vapors and other gaseous contaminants. For nuisance level relief only.**

* 3M recommended for ozone protection up to 10X OSHA PEL. Not NIOSH approved for ozone.
** 3M recommended for relief against nuisance level acid gas or organic vapors. Nuisance levels are less than OSHA PEL or applicable government occupational exposure limits, whichever is lower.
### Product Ordering Information

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</table>

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**WARNING**

These respirators help reduce exposures to certain airborne particulates. Before use, the wearer must read and understand the User Instructions provided as a part of the product packaging. A written respiratory protection program must be implemented meeting all the requirements of OSHA 1910.134 including training, fit testing and medical evaluation. In Canada, CSA standards Z94.4 requirements must be met and/or requirements of the applicable jurisdiction, as appropriate. Misuse may result in sickness or death. For proper use, see package instructions, supervisor, or call 3M PSD Technical Service in USA at 1-800-243-4630 and in Canada at 1-800-267-4414.

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**For More Information**

Technical Assistance in US 1-800-243-4630
Technical Assistance in Canada 1-800-267-4414
www.3M.com/workersafety

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