Particulate Welding Respirators 8214 and 8514, N95 with Nuisance Level Organic Vapor Relief

The 3M™ Particulate Welding Respirators 8214 and 8514, N95 are designed for applications such as welding, soldering and other operations involving metal fumes including those with ozone\(^1\) and nuisance levels of organic vapors.\(^2\) These products’ many features help provide workers comfortable, durable respiratory protection.

NIOSH approved N95
• At least 95% filtration efficiency against solid and liquid aerosols that do not contain oil.\(^3\) TC-84A-0454

3M™ Cool Flow™ Exhalation Valve
• Proprietary one-way valve offers easy exhalation for cooler dry comfort.

Carbon Filter Material
• Provides 3M recommended ozone protection (up to 10 x PEL).\(^1\)
• Provides relief from odors caused by nuisance level organic vapors associated with some welding operations.\(^2\)

Cake-resistant filter media
• Uniquely-designed filter layers reduce the caking of particles on the respirator surface.
• Helps make the respirator breathe easier longer, which contributes to comfort, longer service life and increased savings.

Face seal (8214 only)
• Contours easily to help provide a good seal.
• Comfortable to wear.

Adjustable noseclip
• Helps provide a custom fit and secure seal.
• Reduces the potential for eyewear fogging.

Fully adjustable straps
• A single tug helps provide a comfortable, secure fit.

3M™ Welding Web
• The protective layers of this respirator are flame resistant as demonstrated per ASTM D2859-96. Not a substitute for a faceshield.

Suggested Applications
• Welding
• Brazing
• Soldering
• Torch cutting
• Metal pouring
• Grinding
• Sanding
• Sweeping
• Bagging
• Other dusty/hot operations
• Foundry operations
• Lab settings
• Petrochemical operations
• Undercoating

1. 3M recommended for ozone protection up to 10 times the OSHA PEL, or applicable exposure limits, whichever is lower. (Not NIOSH approved for ozone.)
2. 3M recommended for relief against nuisance levels of organic vapors. Nuisance level organic vapor refers to concentrations not exceeding the OSHA PEL, or applicable exposure limits, whichever is lower.
3. Tested against particles approximately 0.3 micron in size (mass median aerodynamic diameter) per 42 CFR 84.
Respirators

Respirators

Use For:
• Solids such as those from processing minerals, coal, iron ore, flour, and certain other substances.
• Liquid or non-oil based particles from sprays that do not also emit harmful vapors.
• Metal fumes produced from welding, cutting and other operations involving heating of metals.

Do Not Use For:
Gases, oil aerosols, asbestos, arsenic, cadmium, lead, 4,4’-methyleneedianiline (MDA) or sandblasting. Aerosol and/or ozone concentrations that exceed 10 times the OSHA PEL, or applicable exposure limits, whichever is lower. Organic vapors, including those present in paint spraying operations, when concentrations exceed the OSHA PEL or applicable exposure limits, whichever is lower. These respirators do not supply oxygen.

Important
Before using these respirators, you must determine the following:
1. The type of contaminant(s) for which the respirator is being selected.
2. The concentration level of contaminant(s).
3. Whether the respirator can be properly fitted on the wearer’s face. Do not use with beards, on other facial hair, or other conditions that prevent a good seal between the face and the faceseal of the respirator.
4. Before use of these respirators, a written respiratory protection program must be implemented, meeting all the requirements of OSHA 29 CFR 1910.134, including training, medical evaluation and fit testing.

Time Use Limitation
If respirator becomes damaged, soiled, or breathing becomes difficult, leave the contaminated area immediately and dispose of the respirator.

Technologies

<table>
<thead>
<tr>
<th>Technologes</th>
<th>8214</th>
<th>8514</th>
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<tbody>
<tr>
<td>3M™ Cool Flow™ Exhalation Valve</td>
<td>Proprietary one-way valve for easy exhalation and cool, dry comfort.</td>
<td>1</td>
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<tr>
<td>Face seal</td>
<td>Soft and secure, conforms closely to face for long-lasting comfort and protection.</td>
<td>✓</td>
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<tr>
<td>Advanced Electret Media</td>
<td>Advanced electrostatically charged microfibers make breathing easier and cooler.</td>
<td>✓</td>
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<tr>
<td>Odor-removing filter material</td>
<td>Carbon layers remove many nuisance level odors for greater comfort and productivity.</td>
<td>✓</td>
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<tr>
<td>Cake-resistant filter media</td>
<td>Specially designed filter layers provide longer respirator life and easier breathing.</td>
<td>✓</td>
</tr>
<tr>
<td>Fully adjustable straps</td>
<td>A single tug helps provide a comfortable, secure fit.</td>
<td>✓</td>
</tr>
<tr>
<td>3M™ Welding Web</td>
<td>Unique protective layers are designed to be flame resistant as demonstrated per ASTM D2859-96. (Not a substitute for a faceshield.)</td>
<td>✓</td>
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</tbody>
</table>

Respirators Per Box | Respirators Per Case
---|---
10 | 80

3M Occupational Health and Environmental Safety Division
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For more information, please contact:

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For other 3M products
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