

3M™ Disposable Welding Respirators



Breathe Easier

Experience greater breathing comfort with 3M's disposable welding respirators.

Designed with welders' needs in mind, 3M™ Disposable Welding Respirators have proprietary technology that allows the wearer to breathe easier and potentially reduce costs by wearing the respirator longer.

The Power to Protect Your WorldSM

3M



Respiratory protection should be an integral part of your welding safety program.

You're surrounded by a complex mixture of fumes every time you work. 3M™ Disposable Welding Respirators can help you reduce your exposure to airborne particulate contaminants.

According to a March 2013 OSHA fact sheet, exposure to welding fumes and gases can result in eye, nose and throat irritation, dizziness and nausea. Prolonged exposure to welding fumes has been associated with various types of cancer. Extended exposure to manganese fumes has been associated with symptoms similar to those of Parkinson's disease.

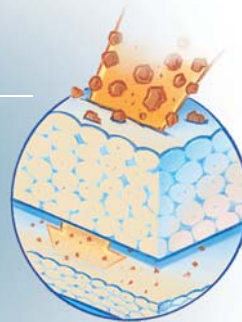
https://www.osha.gov/Publications/OSHA_FS-3647_Welding.pdf

3M develops advanced materials to help you breathe easier

3M™ Disposable Welding Respirators



The cake-resistant filter media helps prevent buildup.



The proprietary 3M™ Cool Flow™ Valve helps reduce heat buildup inside the respirator.



Advanced Electrostatic Media (AEM). Highly charged microfibers arranged in an open formation enhance the capture of airborne particles and allow for greater passage of air through the media.

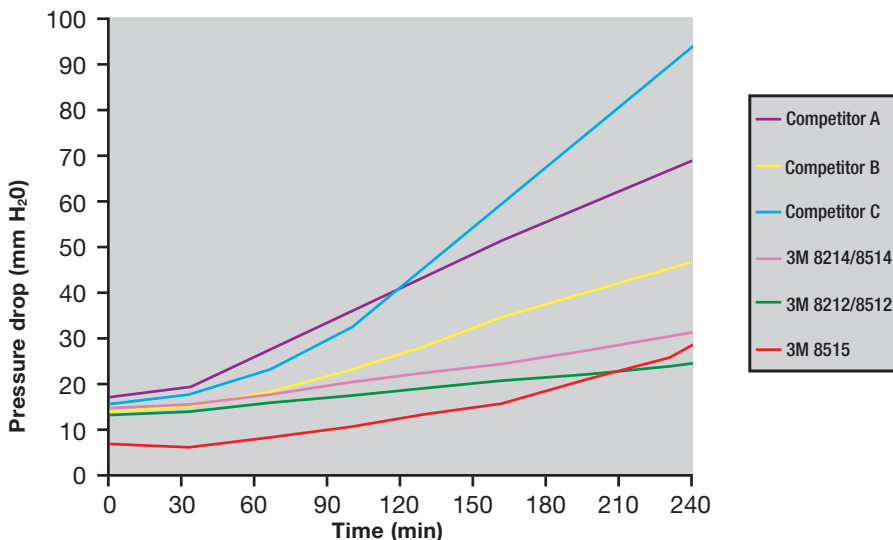
Illustration of 10,000x magnified electrostatically charged microfibers.

3M Disposable Welding Respirator technology

- The cake-resistant filter media helps prevent buildup on the respirator, providing longer respirator life. (Does not apply to the 3M 8515.)
- Welding web is flame resistant per modified ASTM D2859. (Not a substitute for a faceshield.)
- Advanced Electrostatic Media (AEM) technology enhances airflow through the material.
- The proprietary 3M™ Cool Flow™ Valve helps reduce heat buildup inside the respirator.

3M Disposable Welding Respirators meet the challenge.

The chart below demonstrates that after exposure to welding fumes, 3M's disposable welding respirators are easier to breathe through when compared with several competitive respirators.*



*Loading with flux-cored arc welding fume (mild steel wire on mild steel base) at 85 L/min. Source: "Comparison of Pressure Drop and Filtration Efficiency of Particulate Respirators using Welding Fumes and Sodium Chloride" Ann.Occup. Hyg., Vol. 55, No. 6 pp. 666-680, 2011.

Note: 8212 and 8514 models were not tested but are the same construction as 8512 and 8214, respectively, with the exception of the presence of faceshield.

Approximate time values based on loading to 70 mg.

These results are not intended to replicate all worker breathing rates. Actual results may vary.

3M™ Disposable Respirators Designed for Welding Applications

Welding and metal-pouring respirators all feature the proprietary 3M™ Cool Flow™ Valve and Advanced Electrostatic Media (AEM).

8512 (N95)

This respirator features the 3M™ Cool Flow™ Valve, welding web, cake-resistant filter media, nose foam, adjustable noseclip and buckle straps.

Potential applications: welding, metal pouring.



8514 (N95)

A respirator designed for applications where metal fumes are present, including those with ozone* and nuisance-level organic vapors.** This respirator features the 3M™ Cool Flow™ Valve, welding web, cake-resistant filter media, nose foam, adjustable noseclip and buckle straps.

Potential applications: welding, particularly with stainless, galvanized and aluminum metal pouring.



8212 (N95)

This option contains all of the features of the 8512, plus a comfortable foam face seal.

Potential applications: welding, metal pouring.



8214 (N95) AAD #07187

All the features of the 8514, plus a comfortable foam face seal.***

Potential applications: welding, particularly with stainless, galvanized and aluminum metal pouring.



8515 (N95) AAD #07189

An economical option for welders. Features the 3M™ Cool Flow™ Valve, welding web, adjustable M-Noseclip and braided headbands to help provide a custom and secure seal.

Potential applications: welding, metal pouring.

Does not contain cake-resistant filter media.



*3M recommended for ozone protection up to 10X OSHA PEL. Not NIOSH approved for ozone.

**3M recommended for relief against nuisance-level organic vapors. Nuisance levels are less than OSHA PEL or applicable government occupational exposure limits, whichever is lower.



WARNING

These respirators help protect against certain particles. **Misuse may result in sickness or death.** For proper use, see supervisor, or *User Instructions*, 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 Service: 1-800-243-4630
Customer Service: 1-800-328-1667
Website: 3M.com/PPESafety

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