

# Particulate Respirators 8233, N100 and 8293, P100

Issue Date 01/01/04

The 3M™ Particulate Respirators 8233, N100 and 8293, P100 are well suited for those who want NIOSH's highest rated filtration efficiency in a maintenance free respirator. These respirators are an excellent choice for lead abatement, pharmaceutical manufacturing, welding and work involving substance specific regulated particles\* (excluding asbestos).

The 8233 and 8293 offer a number of benefits to you and your workers:

### NIOSH approved 8233, N100

- At least 99.97% filtration efficiency against solid and liquid aerosols that do not contain oil.\*\* TC-84A-1298

### NIOSH approved 8293, P100

- At least 99.97% filtration efficiency against solid and liquid aerosols including oils.\*\* TC-84-2561

### 3M™ Cool Flow™

#### Exhalation Valve

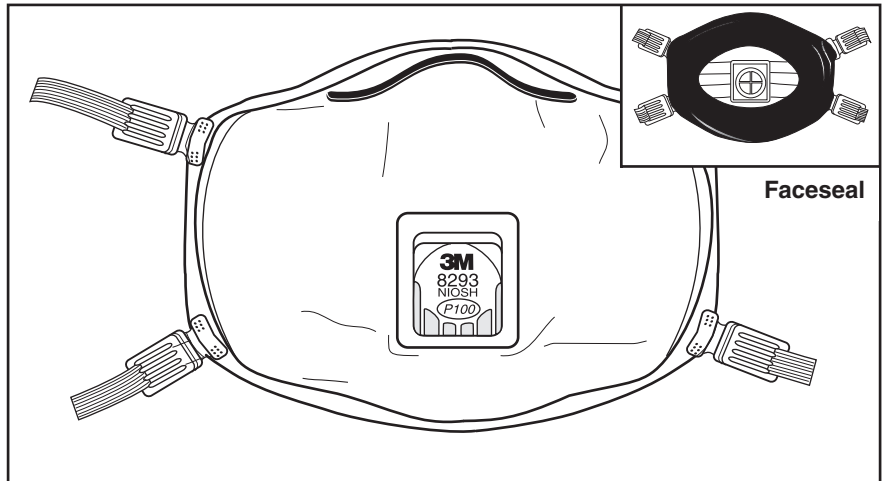
- Patented one-way valve offers easy exhalation and cool, dry comfort.

#### Face Seal

- Comfortable to wear.
- Contours easily to help provide a good seal.

#### Adjustable noseclip

- Helps provide a custom fit and secure seal.
- Reduces the potential for eyewear fogging.



3M™ Particulate Respirator 8293, P100

### Lightweight construction

- Promotes greater worker comfort.
- Contributes to increased wear time.

The 8293 may be used in environments that may contain oil aerosols.

### All filter design

- Provides economical protection.
- No spare parts to maintain.
- Promotes easier communication.


### Suggested Applications



- OSHA substance specific particle exposures\*
  - Lead
  - Cadmium
  - Arsenic
  - 4,4'–Methylenedianiline (MDA)
- Pharmaceutical manufacturing



- Welding
- Brazing
- Soldering
- Torch cutting
- Metal pouring



## ⚠ WARNING

These respirators help reduce exposure to certain particles. **Misuse may result in sickness or death.** Before use, the wearer must read and understand **User Instructions** provided as a part of product packaging. Time use limitations may apply. For proper use, see package instructions, supervisor or call 3M OH&ESD Technical Service in U.S.A., 1-800-243-4630. In Canada, call 1-800-267-4414.

\*Substance specific regulated particles include but are not limited to lead, cadmium, arsenic, 4,4'–Methylenedianiline (MDA) in concentrations up to 10 X the OSHA PEL. Do not use for asbestos exposures.

\*\*Tested against particles approximately 0.3 micron in size (mass median aerodynamic diameter) per 42 CFR 84.

Respirators Per Bag	Respirators Per Case
1	20

**Use For:**

- Solids such as those from processing minerals, coal, iron ore, flour, and other certain 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.
- Certain radioactive particulate material.
- **8293 only**—Liquid or oil based particles from sprays that do not also emit harmful vapors.

**Do Not Use For:**

Gases, vapors, including those present in paint spraying operations, asbestos or sandblasting. Aerosol concentrations that exceed 10 times the OSHA PEL, or applicable government regulations, whichever is lower. **Do not use the 8233 for oil aerosols.** These respirators do not supply oxygen.



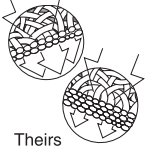
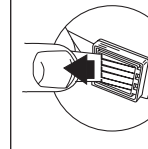
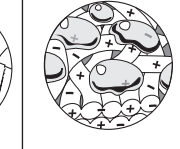
**Important**

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

**3M Occupational Health and Environmental Safety Division**  
3M Center, Building 235-2W-70  
St. Paul, MN 55144-1000

**Technologies** (Check marks indicate technologies featured in these products.)

					
		Ours Theirs		8233	8293
<b>3M™ Cool Flow™ Exhalation Valve</b> Patented one-way valve for easy exhalation and cool, dry comfort.	<b>Faceseal</b> Soft and secure, conforms closely to face for long-lasting comfort and protection.	<b>Advanced Electret Media</b> Advanced electrostatically charged microfibers make breathing easier and cooler.	<b>Fully Adjustable Straps</b> A single tug helps provide a comfortable, secure fit.		
✓	✓	✓	✓		✓

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—8233**

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

**Time Use Limitation—8293**

If respirator becomes damaged, soiled, or breathing becomes difficult, leave the contaminated area immediately and dispose of the respirator. If used in environments containing only oil aerosols, dispose of respirator after 40 hours of use or 30 days, whichever is first.

**Additional Information**

This respirator contains no components made from natural rubber latex.

**For more information, please contact:**

**3M Occupational Health and Environmental Safety Division (OH&ESD)**

**In the U.S., contact:**

**Sales Assistance**  
1-800-896-4223  
**Technical Assistance**  
1-800-243-4630  
**Fax On Demand**  
1-800-646-1655  
**Internet**  
<http://www.3M.com/occsafety>  
**For other 3M products**  
1-800-3M HELPS

**In Canada, contact:**

3M Canada Company, OH&ESD  
P.O. Box 5757  
London, Ontario N6A 4T1  
**Sales Assistance**  
1-800-265-1840, ext. 6137  
**Technical Assistance (Canada only)**  
1-800-267-4414  
**Fax On Demand**  
1-800-646-1655  
**Internet**  
<http://www.3M.com/CA/occsafety>

**Technical Assistance In Mexico**

01-800-712-0646  
5270-2255, 5270-2119 (Mexico City only)

**Technical Assistance In Brazil**

0800-132333

**Fax On Demand O.U.S. Locations**

1-651-732-6530