

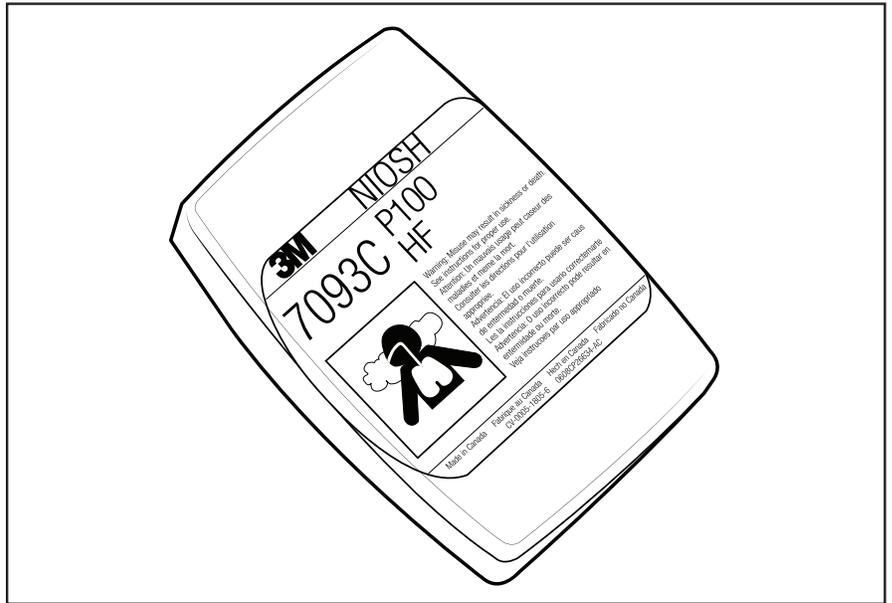
# Cartridge/Filter 7093C, Hydrogen Fluoride, P100, with Nuisance Level Organic Vapor and Acid Gas Relief\*

Issue Date 9/1/09

The 3M™ Cartridge/Filter 7093C, Hydrogen Fluoride, P100 can be used interchangeably with the 3M™ Half and Full Facepiece Respirator 6000, 7000 and Ultimate FX FF-400 Series.

3M™ Cartridge/Filter 7093C, Hydrogen Fluoride, P100 with Nuisance Level Organic Vapor (OV) and Acid Gas (AG) Relief\*

- NIOSH approved for Hydrogen Fluoride as well as oil and non-oil based particulates. At least 99.97% filtration efficiency against solid and liquid aerosols including oils.<sup>1</sup>
- Designed for higher-heat applications.
- Improved filtering technology provides reduced breathing resistance.
- Unique spring-loaded cover design simplifies negative pressure user seal checks.
- Innovative solid-top air-inlet design creates a channeled airflow that reduces premature caking or clogging.



**3M™ Cartridge/Filter 7093C, Hydrogen Fluoride, P100 with Nuisance Level Organic Vapor and Acid Gas relief\***

### Suggested Applications



- Aluminum smelting



- Glass etching
- Chemical manufacturing



- OSHA substance specific particle exposures:
  - Lead
  - Asbestos
  - Cadmium
  - Arsenic
  - 4,4'-Methylenedianiline (MDA)



**⚠ WARNING**

These filters help protect against 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.

\* **3M recommended** for relief against nuisance levels of organic vapor and acid gas. Nuisance level organic vapor and acid gas refers to concentrations not exceeding OSHA Permissible Exposure Limit (PEL) or applicable government exposure limits, whichever is lower. **Not NIOSH approved for organic vapors or acid gases.** Do not use for respiratory protection against organic vapors or acid gases (except hydrogen fluoride).

**References: 1.** Tested against particles approximately 0.3 micron in size (mass median aerodynamic diameter) per 42 CFR 84.

**Additional use instructions, product limitations, approval labels, and warnings are included with each facepiece and filter package.**

## Ordering Information

Part Number	Description
7093C/37173 (AAD)	Cartridge/Filter 7093C, hydrogen fluoride, P100 with nuisance level OV and AG relief* 2 filters/vacuum sealed bag, 6 bags/box, 5 boxes/case = 30 pair
7093CB (Bulk)	Cartridge/Filter 7093C, hydrogen fluoride, P100 with nuisance level OV and AG relief* 2 filters/vacuum sealed bag = 72 pair

\* **3M recommended** for relief against nuisance levels of organic vapor and acid gas. Nuisance level organic vapor and acid gas refers to concentrations not exceeding OSHA Permissible Exposure Limit (PEL) or applicable government exposure limits, whichever is lower. **Not NIOSH approved for organic vapors or acid gases.** Do not use for respiratory protection against organic vapors or acid gases (except hydrogen fluoride).

### Use For:

- Solids such as those from processing minerals, coal, iron ore, cotton, flour, and certain other substances.
- Liquid or oil based particles from sprays that do not also emit harmful vapors.
- Metal fumes produced from welding, brazing, cutting and other operations involving heating of metals.
- Hydrogen Fluoride gas up to 10 times PEL. Acid gases such as Sulfur Dioxide and/or Chlorine below the OSHA PEL or applicable government standards, whichever is lower.

### Do Not Use For:

- Gases and vapors other than hydrogen fluoride, when concentrations exceed the OSHA PEL, or applicable government standards, whichever is lower, including those present in paint spray operations, unless combined with approved chemical cartridges.
- Sandblasting.
- Oxygen deficient atmospheres.
- Concentrations that exceed:
  - 10 times the permissible exposure limit (PEL) with half facepiece, or

- 10 times the PEL with full facepiece qualitatively fit tested, or
- 50 times the PEL with full facepiece quantitatively fit tested, or
- applicable government regulations, whichever is lower.
- Unknown or IDLH environments.

### Important

Before using these filters, 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, other facial hair, or other conditions that prevent a good seal between the face and the faceseal of the respirator.
4. Before occupational use of these cartridge/filters, 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 cartridge/filter becomes damaged, soiled, or breathing becomes difficult, leave the contaminated area immediately and replace the cartridge/filters. If used in environments containing only oil aerosols, dispose of cartridge/filters after 40 hours of use or 30 days, whichever is first. If used for hydrogen fluoride, replace cartridge/filters in accordance with an established change schedule, or earlier if smell, taste or irritation from contaminants is detected.

#### For more information, please contact:

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

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

**Customer Service**  
1-800-328-1667

**Technical Assistance**  
1-800-243-4630

**Website**  
[www.3M.com/OccSafety](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

**Customer Care**  
1-800-364-3577

**Technical Assistance (Canada only)**  
1-800-267-4414

**Website**  
[www.3M.ca/safety](http://www.3M.ca/safety)

**Technical Assistance In Mexico**  
01-800-712-0646  
5270-2255, 5270-2119 (Mexico City only)

**Technical Assistance In Brazil**  
0800-132333



### Occupational Health and Environmental Safety Division

3M Center, Building 235-2E-91  
St. Paul, MN 55144-1000