# **3M** Cartridge/Filter 7093C/37173, Hydrogen Fluoride, P100

User Instructions for Cartridge/Filter 7093C/37173, Hydrogen Fluoride, P100 with Nuisance Level Organic Vapor and Acid Gas Relief\*.

### Important: Keep these *User Instructions* for reference

For use only with 3M<sup>TM</sup> 5000 Series, 6000 Series and 7000 Series half and full facepiece respirators according to the NIOSH approval label.

37173 is a catalog number only. NIOSH approved as 3M™ Cartridge/Filter 7093C, Hydrogen Fluoride, P100.

\*3M recommended for relief against nuisance levels of organic vapor and acid gases. Nuisance level organic vapor and acid gas refers to concentrations not exceeding OSHA PEL or applicable government occupational exposure limits, whichever is lower.



## **∴** WARNING

This cartridge/filter helps protect against certain airborne contaminants. **Misuse may result in sickness or death.** For proper use, see supervisor or *User Instructions*. In the U.S.A. call Technical Service at 1-800-243-4630. In Canada call Technical Service at 1-800-267-4414.

#### **IMPORTANT**

Before use, the wearer must read and understand these *User Instructions*, and the *User Instructions* for the 5000 Series, 6000 Series or 7000 Series half or full facepiece respirator to be used with these cartridge/filters. Keep these *User Instructions* for reference.

#### Use For

- Solid and liquid aerosols including oils that do not also emit **harmful** vapors.
- Metal fumes produced from welding, brazing, cutting and other operations involving heating of metals.
- Radioactive materials such as uranium and plutonium.
- Asbestos
- Hydrogen fluoride gas.
- 3M recommended for relief from nuisance levels of organic vapors and acid gases\*.

\*Nuisance level organic vapor and acid gas refers to concentrations not exceeding OSHA PEL or applicable government occupational exposure limits, whichever is lower.

#### Do Not Use For

- Gases and vapors, other than hydrogen fluoride, when concentrations exceed the OSHA PEL, or applicable government regulations, whichever is lower, including those present in paint spraying operations, unless combined with approved chemical cartridges.
- Sandblasting.

#### **Biological Particles**

These cartridge/filters can help reduce inhalation exposures to certain airborne biological particles (e.g. mold, *Bacillus anthracis*, avian influenza, *Mycobacterium tuberculosis*, etc.) but cannot eliminate the risk of contracting infection, illness or disease. OSHA and other government agencies have not established safe exposure limits for these contaminants.

#### **Use Instructions**

- 1. Failure to follow all instructions and limitations on the use of these cartridge/filters and/or failure to wear the respirator during all times of exposure can reduce respirator effectiveness and **may result in sickness or death.**
- 2. 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 such as medical evaluation, training and fit testing and applicable OSHA substance specific standards. In Canada, CSA standard Z94.4 requirements must be met and/or requirements of the applicable jurisdiction, as appropriate.

- 3. The airborne contaminants which can be dangerous to your health include those so small that you cannot see them.
- 4. Leave the contaminated area immediately and contact your supervisor if you smell or taste contaminants or if dizziness, irritation, or other distress occurs.
- 5. Store the cartridge/filters and respirator away from contaminated areas when not in use.
- 6. Dispose of used product in accordance with applicable regulations.

#### **Use Limitations**

- 1. These cartridge/filters do not supply oxygen. Do not use in atmospheres containing less than 19.5% oxygen.
- 2. Do not use when concentrations of contaminants
  - are Immediately Dangerous to Life or Health,
  - are unknown.
  - exceed 3M recommendations in the "Use For" section of these *User Instructions*,
  - are greater than 10 times the permissible exposure limit (PEL) with half facepiece respirators and full facepiece respirators when qualitatively fit tested,
  - are greater than 50 times the PEL with full facepiece respirators when quantitatively fit tested, or
  - exceed specific OSHA standards or applicable government regulations, whichever is lower.
- 3. Do not alter, clean (e.g. vacuum, wash, use compressed air), abuse or misuse these cartridge/filters and/or respirator.
- 4. Do not use with beards or other facial hair or other conditions that prevent a good seal between the face and the sealing surface of the respirator.

#### **Time Use Limitations**

- 1. If cartridge/filters become damaged, soiled, or breathing becomes difficult, leave the contaminated area immediately and replace the cartridge/filters.
- 2. If used in environments containing only oil aerosols, replace cartridge/filters after 40 hours of use or 30 days, whichever is first.
- 3. 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.

### **Assembly Instructions**

- 1. Align opening of filter with filter attachment on facepiece. Note: The alignment mark on the filter should face the front of the facepiece.
- 2. Turn filter clockwise until it is firmly seated and cannot be further turned.
- 3. Repeat for second filter.

#### NEGATIVE PRESSURE USER SEAL CHECK

#### 3M<sup>TM</sup> Cartridge/Filters 7093C

- 1. Using hands, press or squeeze filter covers toward facepiece to restrict airflow. Be careful not to disturb the position of the respirator. *Inhale gently*. If you feel the facepiece collapse slightly and pull closer to your face with no leaks between your face and the facepiece, a proper seal has been obtained. (Figure 1)
- 2. If faceseal air leakage is detected, reposition respirator on face and/or readjust tension of straps to eliminate the leakage, and repeat step 1.

Important: If you CANNOT achieve a proper seal, DO NOT enter the contaminated area. See your supervisor.



Figure 1

**NIOSH Approved: P100** 

At least 99.97% filtration efficiency against solid and liquid aerosols including oils. Hydrogen Fluoride

This filter contains no components made from natural rubber latex.

#### FOR MORE INFORMATION

In United States, contact:

Website: www.3M.com/OccSafety Technical Assistance: 1-800-243-4630

For other 3M products:

1-800-3M-HELPS or 1-651-737-6501

**3M Occupational Health and Environmental Safety Division** 

3M Center, Building 0235-02-W-70 St. Paul, MN 55144-1000

www.3M.com/OccSafety

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