



Particulate Filters 2000 and 2200 Series, P100

2091/07000

98-0060-0067-7_5
34-8718-6279-2



⚠ WARNING

This filter helps protect against certain airborne contaminants. **Misuse may result in sickness or death.**

User Instructions for 3M™ Particulate Filter 2091/07000 (AAD), P100;
3M™ Advanced Particulate Filter 2291, P100;
3M™ Particulate Filter 2096, P100, with Nuisance Level Acid Gas Relief;*
3M™ Advanced Particulate Filter 2296, P100, with Nuisance Level Acid Gas Relief;*
*3M™ Particulate Filter 2097/07184 (AAD), P100, with Nuisance Level Organic Vapor Relief**;*
*and 3M™ Advanced Particulate Filter 2297, P100, with Nuisance Level Organic Vapor Relief**.*

IMPORTANT: Keep these *User Instructions* for reference.

For use only with 3M™ Full and Half Facepiece Respirators, 5000, 6000, 7000 and FF-400 Series according to the NIOSH approval label. 07000 and 07184 are catalog numbers only. NIOSH approved as 3M™ Particulate Filter 2091 P100 and 3M™ Particulate Filter 2097 P100.

* **3M recommended** for relief against nuisance levels of acid gases. Nuisance level acid gas refers to concentrations less than the OSHA PEL or applicable government occupational exposure limits, whichever is lower.

** **3M recommended** for relief against nuisance levels of organic vapors. Nuisance level organic vapor refers to concentrations less than the OSHA PEL or applicable government occupational exposure limits, whichever is lower.

The 2091, 2096 and 2097 respirator filters have dual approval as United States (US) National Institute for Occupational Safety and Health (NIOSH) P100 particulate filters and as Brazil Ministry of Labor approved P3 SL particulate filters. Standard specific information is provided where applicable. All other information is common to both standards.

IMPORTANT

Before use, the wearer must read and understand these *User Instructions*, and the *User Instructions* for the 3M™ Full and Half Facepiece Respirators, 5000, 6000, 7000 and FF-400 Series to be used with these filters. These filters are NIOSH approved only for use with 3M™ Full and Half Facepiece Respirators, 5000, 6000, 7000 and FF-400 Series. Keep these *User Instructions* for reference.

Use For

Particulate Filters 2091 and 2291, P100

- 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.
- Radioactive particulate materials such as uranium and plutonium.
- Asbestos.

Particulate Filters 2096 and 2296, P100 with nuisance level acid gas relief*

- 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.
- Radioactive particulate materials such as uranium and plutonium
- Asbestos.
- 3M recommended for relief from nuisance levels of acid gases such as sulfur dioxide, hydrogen fluoride and/or chlorine.

* Nuisance level acid gas refers to concentrations less than the OSHA PEL or applicable occupational exposure limits, whichever is lower.

Particulate Filter 2097 and 2297, P100 with nuisance level organic vapor relief**

- 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.
- Radioactive particulate materials such as uranium and plutonium.
- Asbestos.
- 3M recommended for ozone protection up to 10 times the OSHA PEL (**Not NIOSH certified for use against ozone**).
- 3M recommended for relief from nuisance levels of organic vapors.

** Nuisance level organic vapor refers to concentrations less than the OSHA PEL or applicable government occupational exposure limits, whichever is lower.

Do Not Use For

Particulate Filter 2091 and 2291, P100

- Do not use for gases and vapors when concentrations are at or above the OSHA PEL, or applicable government regulations, whichever is lower, including those present in paint spraying operations, unless combined with approved chemical cartridges.
- Do not use for sandblasting.

Particulate Filter 2096 and 2296, P100 with nuisance level acid gas relief*

- Do not use for gases and vapors when concentrations are at or above the OSHA PEL, or applicable government regulations, whichever is lower, including those present in paint spraying operations, unless combined with approved chemical cartridges.
- Do not use for sandblasting.

* Nuisance level acid gas refers to concentrations less than the OSHA PEL or applicable occupational exposure limits, whichever is lower.

Particulate Filter 2097 and 2297, P100 with nuisance level organic vapor relief**

- Do not use for gases and vapors when concentrations are at or above the OSHA PEL, or applicable government regulations, whichever is lower, including those present in paint spraying operations, unless combined with approved chemical cartridges.
- Do not use for ozone when concentrations exceed 10 times the OSHA PEL.
- Do not use for sandblasting.

** Nuisance level organic vapor refers to concentrations less than the OSHA PEL or applicable government occupational exposure limits, whichever is lower.

Biological Particles

These particulate 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 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 filters, a written respiratory protection program must be implemented meeting all the local applicable requirements. In the U.S., follow OSHA 29 CFR 1910.134 which includes medical evaluation, training and fit testing. In the U.S., users must also comply with applicable OSHA substance specific standards. In Canada, CSA standard Z94.4 requirements must be met and/or requirements of the applicable jurisdiction, as appropriate. In Brazil, follow the requirements of the Respiratory Protection Program of the Ministry of Labor.

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 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 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 the 3M recommendations in the “Use For” and “Do Not Use For” sections 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 local applicable government regulations (such as OSHA standards in the U.S.) or other applicable government regulations, whichever is lower.
3. Do not alter, clean (e.g. vacuum, wash, use compressed air), abuse or misuse these 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.

In Brazil, according to the Respiratory Protection Program of the Ministry of Labor, do not use when concentrations of contaminants are greater than 10 times the permissible exposure limit using a half facepiece or 100 times the permissible exposure limit using a full facepiece.

Time Use Limitations

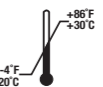
1. If filters become damaged, soiled or breathing becomes difficult, leave the contaminated area immediately and replace the filters.
2. If used in environments containing only oil aerosols, dispose of filters after 40 hours of use or 30 days, whichever is first.
3. If used for ozone protection (3M™ Particulate Filter 2097 and 2297 P100 with nuisance level organic vapor), replace filters in accordance with an established change schedule, or earlier if smell, taste or irritation from contaminants is detected.

Storage Conditions and Shelf Life

Before use, store filters in the original packaging, away from contaminated areas, dust, sunlight, extreme temperatures, excessive moisture and damaging chemicals. When stored in accordance with temperature and humidity conditions specified below, the filter may be used until the “use by” date specified on packaging. Always inspect product and conduct a user seal check before use as specified in the respirator *User Instructions*. **If you cannot achieve a proper seal, do not enter the contaminated area. See your supervisor.**



End of Shelf Life
Use respirators before the “use by” date specified on packaging



Storage Temperature Range
-20°C (-4°F) to +30°C (+86°F)



Storage Maximum Relative Humidity
<80% RH

NIOSH Approved: P100 Particulate Filter
At least 99.97% filtration efficiency against solid and liquid aerosols including oils.

For Compliance in Brazil NOTE: Particulate Filters 2091, 2096, 2097, P3 SL

In Brazil, Ministry of Labor approved as filter class P3 SL.

NOTE:

1. In Brazil do not use when concentrations of contaminants are greater than 100 times the permissible exposure limit using full facepiece.
2. Do not use in deficient or enriched oxygen atmospheres.
3. Storage, Transportation and Care: store in a clean and dry place and away from contaminants and extreme temperature and humidity.
4. The components of this filter are made of materials which are not expected to cause adverse health effects.
5. It is necessary to have special care to use this product in explosives atmospheres.

FOR MORE INFORMATION



THIS FILTER IS APPROVED ONLY IN THE FOLLOWING CONFIGURATIONS:



RESPIRATOR COMPONENTS

Table with columns for TC, PROTECTION, FILTER, RESPIRATOR COMPONENTS, and CAUTIONS AND LIMITATIONS. Components include ALTERNATE RESPIRATOR, ALTERNATE FACEPIECE, NOSE/CLIP, VALVE COVER, ALTERNATE CENTER ADAPTER, PLUG, VALVE ASSEMBLY, ALTERNATE FILTER ADAPTER, ALTERNATE LENS, ALTERNATE CARTRIDGE, ALTERNATE BREATHING TUBE, ALTERNATE AIRLINE ADAPTER, ALTERNATE REGULATOR, ALTERNATE BELTS, SHOULDER STRAP, ALTERNATE HOSE, and ACCESSORIES.

- 1. PROTECTION
P100 - Particulate Filter (99.97% filter efficiency level) effective against all particulate aerosols.
OV - Organic vapor
SD - Sulfur dioxide
HC - Hydrogen chloride
CL - Chlorine
CD - Chlorine dioxide
HF - Hydrogen fluoride
HS - Hydrogen sulfide
AM - Ammonia
MA - Methylamine
FM - Formaldehyde
MV - Mercury vapor
SA - Supplied-Air
CF - Continuous flow
PD - Pressure demand
HS(esc) - Hydrogen sulfide (escape only)

- 2. CAUTIONS AND LIMITATIONS
A - Not for use in atmospheres containing less than 19.5 percent oxygen.
B - Not for use in atmospheres immediately dangerous to life or health.
C - Do not exceed maximum use concentrations established by regulatory standards.
D - Air-line respirators can be used only when the respirators are supplied with respirable air meeting the requirements of CGA G-7.1 Grade D or higher quality.
E - Use only the pressure ranges and hose lengths specified in the User's Instructions.
G - If airflow is cut off, switch to filter and/or cartridge or canister and immediately exit to clean air.
H - Follow established cartridge and canister change schedules or observe ESL to ensure that cartridge and canisters are replaced before breakthrough occurs.
J - Failure to properly use and maintain this product could result in injury or death.
K - The Occupational Safety and Health Administration regulations require gas-proof goggles to be worn with this respirator when used against formaldehyde.
L - Follow the manufacturer's User's Instructions for changing cartridges, canister and/or filters.
M - All approved respirators shall be selected, fitted, used, and maintained in accordance with MSHA, OSHA, and other applicable regulations.
N - Never substitute, modify, add, or omit parts. Use only exact replacement parts in the configuration as specified by the manufacturer.
O - Refer to User's Instructions, and/or maintenance manuals for information on use and maintenance of these respirators.
P - NIOSH does not evaluate respirators for use as surgical masks.
S - Special or critical User's Instructions and/or specific use limitations may apply. Refer to User's Instructions before donning.