

Cleaning and Disinfecting 3M Reusable Elastomeric Half and Full Facepiece Respirators following Potential Exposure to Coronaviruses

Description

During coronavirus outbreaks, some healthcare organizations may assign reusable elastomeric facepieces to workers providing care for patients with suspected cases of coronavirus. This document contains considerations related to cleaning and disinfecting facepieces that will be used again after potential exposure to coronaviruses.

The 2008 U.S. CDC publication [Guideline for Disinfection and Sterilization in Healthcare Facilities](#)¹ (updated May 2019) includes information on disinfecting equipment and surfaces potentially contaminated by coronaviruses. The US CDC investigated many chemicals and cited several chemical germicides as being effective for coronaviruses, when used as indicated in the product user instructions. One of these chemicals can be used to clean 3M reusable respirator facepieces per the 3M product *User Instructions* and those included in this document:

Effective after a 1-minute contact time:

- Sodium hypochlorite (at a free chlorine concentration of 5,000 ppm)

Your facility should review this information thoroughly prior to selecting this disinfecting product for your equipment and specific application. Follow the hygiene and infection control practices established by your employer for the targeted organisms, including coronaviruses. Please note that 3M has not evaluated the effectiveness of this agent with regards to inactivating viruses on 3M equipment.

Please always refer to the latest information from trusted sources such as the World Health Organization ([WHO](#)), the US Centers for Disease Control and Prevention ([US CDC](#)), the US Occupational Safety and Health Administration ([OSHA](#)) and the European Centres for Disease Prevention and Control ([ECDC](#)) regarding selection, use, maintenance and cleaning of personal protective equipment.

Note that respirator facepiece components may become damaged over time with prolonged or extended use of disinfecting products. As discussed in the product *User Instructions*, users must inspect their respirator following each disinfecting cycle and prior to re-use. If you discover any signs of damage, remove the facepiece from service and either discard and replace or repair as appropriate, following the guidance in the product *User Instructions*.

1. Guideline for Disinfection and Sterilization in Healthcare Facilities, 2008; updated 2009. United States Centers for Disease Control. William A. Rutala, Ph.D., M.P.H., David J. Weber, M.D., M.P.H. and the Healthcare Infection Control Practices Advisory Committee (HICPAC). 2008. <https://www.cdc.gov/infectioncontrol/pdf/guidelines/disinfection-guidelines-H.pdf>

Cleaning, Sanitizing and/or Disinfecting 3M Half and Full Facepieces

- 1) Cleaning is recommended after each use. Nitrile or vinyl gloves should be worn during cleaning as well as other personal protective equipment (PPE) as indicated.
- 2) Remove and discard any filters or cartridges. Facepiece may be further disassembled as necessary.
- 3) Inspect facepiece per the *User Instructions* to identify any damage or excessive wear. Repair or replace facepiece as necessary.
- 4) Clean facepiece (excluding filters or cartridges) by immersing it in a warm cleaning solution, water temperature not to exceed 120 °F (49 °C), and scrub with soft brush until clean. Add neutral detergent if necessary. Do not use cleaners containing lanolin or other oils
- 5) Disinfect by soaking the facepiece according to the user instructions for the selected disinfectant, including usability, application and contact time.
- 6) Rinse thoroughly with fresh warm water.
- 7) Air dry in non-contaminated area.
- 8) Inspect and reassemble respirator as described in the *User Instructions*.

Glossary of Terms

Below is a glossary of terms used in this document^{1 2}:

Cleaning: Removal of all soil (organic and inorganic) and foreign material from objects and surfaces. This is typically accomplished with water and mechanical action. Detergents may be used to assist the process.

NOTE: Failure to remove foreign material (soil, face oils, etc.) from an object can make the disinfecting process ineffective.

Sanitizing: A process to reduce the number of microorganisms on an inanimate object to “safe” levels (but may not destroy disease-producing organisms). E.g., dishes and eating utensils are normally sanitized.

Disinfecting: A process of inhibiting or destroying disease-producing microorganisms (but may not kill bacterial spores). It usually involves the use of chemicals, heat, and/or ultraviolet light and is divided into three categories: high, intermediate and low-level disinfection.

Sterilizing: A validated process to render a product free of all forms of viable microorganisms, including bacteria, viruses, spores, and fungi.

NOTE: Items must be thoroughly cleaned before effective sterilization can occur.

Before using any of the products or information detailed herein, you must evaluate it and determine if it is suitable for your intended use. You assume all risks and liability associated with such use. 3M makes no warranties relating to the efficacy of any of the products detailed herein in preventing the spread and/or contraction of coronavirus. 3M will not be liable for any loss or damage arising from any information contained herein, whether direct, indirect, special, incidental or consequential, regardless of the legal or equitable theory asserted, including warranty, contract, negligence or strict liability.

Technical information provided by 3M is based on experience and/or test data believed to be reliable, but the results may not be relevant to every user’s application. For this reason, 3M does not accept any responsibility or liability,

1. Rutala, WA. American Journal of Infection Control. APIC Guideline for Selection and Use of Disinfectants. Vol. 24, No. 4, pp. 313-342, August 1996.
2. Rutala, WA. CDC. Guideline for Disinfection and Sterilization in Healthcare Facilities. 2008.

direct or consequential, arising from reliance upon any information provided. The user should determine the suitability of any disinfectant product for compatibility for use with 3M products.

If you have any questions or concerns, please contact your local 3M representative.

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