Cleaning and Disinfecting 3M™ Head, Eye and Face Protection Products following Potential Exposure to Coronaviruses

Description

3M is experiencing an increase of inquiries asking for guidance on how to clean and disinfect Head, Eye and Face protection products. This document contains considerations related to cleaning and disinfecting Head, Eye and Face protection products, that will be used again after potential exposure to coronaviruses. A best practice is not to share personal protective equipment products between users, however in some situations workers may be sharing these products. It is important to understand how to clean and disinfect and also understand the limitations of disinfecting procedures and the critical need for inspection in order to ensure proper functioning of the products.

Please always refer to the latest information from trusted sources such as the World Health Organization (WHO), the U.S. Centers for Disease Control and Prevention (U.S. CDC), the U.S. 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.


For specific 3M guidance on eye protection for infection control, please follow this link: https://multimedia.3m.com/mws/media/576928O/tech-data-bulletin-192-eye-protection-for-infectious-disease.pdf

NOTE: The guidance in this Technical Bulletin may exceed the directions found in certain 3M Head, Eye and Face Protection products User Instructions and is therefore intended only for cleaning and disinfecting the specified products following potential exposure to coronaviruses. Note that components of head, eye and face protection products may experience detrimental effects over time with prolonged or extended use of cleaners and disinfecting products. As discussed in the product User Instructions, users must inspect their head, eye and face protective equipment prior to each use. If you discover any signs of damage, remove the head, eye or face protective product from service and either replace components or replace the entire product as appropriate, following the guidance in the product User Instructions. A best practice is not to share these personal protective equipment products between users. Your facility should review this information thoroughly and conduct a risk assessment prior to selecting a cleaning and disinfecting process for your equipment and specific applications.

Cleaning

Definition: Removal of all soil (organic and inorganic) and foreign material from objects and surfaces. This is typically accomplished with water and mechanical action. Mild soap or 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.\(^1,2\)

1) Cleaning is recommended after each use for eyewear and face shields and as needed for head protection. Nitrile or vinyl gloves should be worn during cleaning as well as other personal protective equipment (PPE) as indicated by your facility.

2) The following may be removed to help facilitate cleaning and drying of components: foam gaskets and/or straps from eyewear and goggles; face shields from their brackets; brow pads/sweatbands from headgear and hard hats; suspensions from hard hats.

3) Clean components as directed by your facility by immersing in warm water, temperature not to exceed 120 °F (49 °C), mild soap or detergent may be added to assist the process, and scrub with soft cloth until clean. Do not use cleaners containing lanolin or other oils.

4) Air dry all components in a non-contaminated area if not proceeding with disinfecting step.

**Disinfecting**

**Definition:** 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.\(^1,2\)

This Technical Bulletin specifically addresses use of disinfectant chemicals. The following references are being included and may be useful. The United States Environmental Protection Agency (EPA) published List N: Disinfectants for Use Against SARS-CoV-2.\(^3\) It is a list of EPA’s registered antimicrobial products for use against novel coronavirus SARS-CoV-2, the cause of COVID-19, as a reference for specific disinfectants that can be used against coronaviruses. In Canada, Health Canada has a database of Drug Identification Number (DIN) approved disinfecting agents for use against novel coronavirus SARS-CoV-2, the cause of COVID-19. Consult applicable local guidance for your region as it is related to disinfection for coronaviruses.

**NOTE:** 3M relies on the expertise of the CDC and EPA with respect to microbiological efficacy and has not evaluated the effectiveness of these agents with regards to inactivating viruses on 3M equipment. It is important to note that many disinfectant products on the EPA List N are for application to hard, non-porous surfaces and some head, eye and face products contain other surface types. Follow the hygiene and infection control practices established by your employer for the targeted organisms, including for coronavirus.

EPA List N and Health Canada approved disinfecting chemicals containing the following may be an option, however your facility should review this information thoroughly prior to selecting a disinfecting product for your equipment and specific application.

While the following two types of disinfectants are believed to be generally compatible with the hard surface materials of 3M head, eye and face protection products, testing per the ANSI Z87.1 Eye Protection Standard (or EN 166 Personal eye-protection for European CE certified products) and ANSI Z89.1 for Industrial Head Protection (or EN 397 Industrial safety helmets for European CE certified products) has NOT been performed after use of these disinfectants. Use of other disinfectant types is not recommended. Users must inspect their head, eye and face protective equipment prior to each use. If you discover any signs of damage or discoloration; remove the head, eye or face protective product from service and either replace components or replace the entire product as appropriate.

- Water based bleach products or wipes - Sodium hypochlorite (at a free chlorine concentration of 5,000 ppm (0.5%) – typically 1:10 ratio of bleach to water)
- Isopropyl Alcohol (IPA) based products or wipes at a concentration of 60 to 70% IPA*
These disinfection instructions are for hard surface components of the head, eye and face protection products. Neoprene goggle straps may also be disinfected. The following should be removed: foam gaskets and/or fabric straps from eyewear and goggles; brow pads/sweat-bands from headgear and hard hats; hard hat suspensions. With any disinfecting agent, follow the User Instructions and/or EPA label in regard to PPE needed, usability, application and contact time. Disinfect by soaking or wiping the hard surface components such as eyewear, goggles, face shield or hard hat shell according to the User Instructions for the selected disinfectant chemical. Surfaces must be visibly wet with disinfectant for the full specified contact time. 3M strongly recommends that a water rinse/wipe down occur after disinfection to thoroughly remove disinfection chemicals and reduce the possibility of user irritation and premature degradation of equipment. Air dry in a non-contaminated area. Reassemble per User Instructions.

IMPORTANT: Eyewear and face shield coatings and components may become damaged over time with prolonged or extended use of disinfecting products. Users must inspect the eyewear, face shield or hard hat in accordance with the User Instructions following each disinfecting cycle and prior to re-use. If you discover any signs of damage or discoloration, remove from service and either replace components or replace the entire product as appropriate.

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, 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.

References


