

Cleaning and Disinfecting 3M™ Speedglas™ Welding Helmets following Potential Exposure to Coronaviruses

3M™ Speedglas™ Welding Helmet 9100, G5-02, 9100FX, SL, 100, 9002NC, 9100-QR, Heavy Duty Welding Helmet G5-01, 9100-Air, 9100FX-Air, and 9100MP

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 3M™ Speedglas™ Welding Helmets, 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.

Link to EPA Guidance for Cleaning and Disinfecting Public Spaces, Workplaces, Businesses, Schools, and Homes:
https://www.epa.gov/sites/production/files/2020-04/documents/316485-c_reopeningamerica_guidance_4.19_6pm.pdf

NOTE: The guidance in this Technical Bulletin may exceed the directions found in certain 3M™ Speedglas™ Welding Helmets User Instructions and is therefore intended only for cleaning and disinfecting the specified products following potential exposure to coronaviruses. Note that components of 3M™ Speedglas™ Welding Helmets 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 welding helmet prior to each use. If you discover any signs of damage, remove the welding helmet 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.

Of the chemicals listed by the CDC as being appropriate for coronaviruses and those included on the EPA's registered list for use against SARS-CoV-2, only certain chemicals can be considered for use with the 3M™ Speedglas™ Welding Helmets per the 3M product User Instructions and the guidelines included in this document. Using methods other than the disinfectants recommended below may degrade materials and shorten the lives of 3M™ Speedglas™ Welding Helmets.

Possible Disinfection Methods

While the following types of disinfectants are believed to be generally compatible with the hard surface materials of 3M head protection products, careful use must be applied. Thorough inspection of all components for damage must be done following disinfection

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

3M configured and tested helmets listed in this technical bulletin with standard outside protection plates. Each helmet was wiped 100 consecutive times using minimal force. The rag was dipped in the test material such that it was wet but not dripping. Samples were allowed to air dry completely after each wipe. These wiped samples were visually inspected for signs of damage such as cracking, crazing, fogging, and hazing. Upon visual inspection, no damage was noted and only test material residue remained. Following this visual inspection, the capability of the samples to withstand impact and penetration were evaluated by testing them against elements of their relevant performance regulation(s) for ANSI Z87.1 eye and face protection and ANSI Z89.1 head protection. The objective of this testing was not to show compliance to the regulation, but rather to gauge any significant decrease in performance to the applicable standard. No significant findings were noted in either case.

If an EPA-Registered Disinfectant is Required

While the chemicals listed below are believed to be generally compatible with 3M™ Speedglas™ Welding Helmets, impact testing per ANSI Z87.1 Eye Protection Standard and/or ANSI Z89.1 for Industrial Head Protection has NOT been performed after use of these disinfectants. If impact protection per these standards is required for your work environment, do not clean or disinfect with the chemicals listed below.

- Clorox Healthcare® Bleach Germicidal Disinfectant Wipes (EPA Reg. No. 67619-12)
- 3M™ C.diff Solution Tablets (EPA Reg. No. 71847-6)
- ECOLAB® KLERCIDE™ 70/30 IPA (EPA Reg. No. 1677-249)
- PeridoxRTU™ (EPA Reg. No 8383-13)
- Sani-Cloth® Bleach Germicidal Disposable Wipes (9480-8)

Always read and follow the user instructions and/or EPA label for your selected disinfectant. 3M strongly recommends that a water rinse/wipe down occur after disinfection to thoroughly remove disinfection solution and reduce the possibility of user irritation and premature degradation of equipment.

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.

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.

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.

Cleaning and Disinfecting 3M™ Speedglas™ Welding Helmet

It is important to always read and follow the specific Speedglas™ Welding Helmet *User Instructions*. The following general guidelines can be utilized as an additional reference for cleaning, sanitizing, and/or disinfecting your M-Series Headgear assembly.

General

- 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) With any disinfecting agent, follow the *User Instructions* and/or EPA label in regards to usability, application and contact time.
- 3) Ensure all components are thoroughly rinsed with fresh, warm water and thoroughly dried before use or storage.

Cleaning

Remove auto-darkening filter (ADF) and use a soft cloth to wipe down the entire surface of the ADF. A mild general-purpose cleaner may be lightly sprayed on a soft cloth if additional cleansing is needed, however do not spray cleaning materials directly on the ADF.

If cleaning to remove gross soil before disinfection, clean all parts of the Speedglas™ Welding Helmet assembly (excluding ADF) with a clean soft cloth dampened with warm water containing a mild pH neutral (pH 6-8) detergent (refer to specific product *User Instructions* for water temperature guidance).

The sweat band may be hand washed or laundered with a solution of soapy water.

Disinfecting

Disinfect the Speedglas™ Welding Helmet by wiping with a soft, clean cloth dampened with sodium hypochlorite solution (at a free chlorine concentration of 5,000 ppm) with 1-minute contact time. If using a commercial disinfectant cleaner, follow the user instructions and/or EPA label for the selected disinfectant. Surfaces must be visibly wet with disinfectant for the full specified contact time.

Rinse

Remove disinfection solution from the Speedglas™ Welding Helmets by wiping with a clean cloth dampened with fresh water. Rinse the cloth often to help ensure effective removal of the disinfectant solution.

Dry

All components should be allowed to air-dry completely prior to reuse or storage. Air dry in an uncontaminated atmosphere, temperature not to exceed 49 °C (120 °F).

After Cleaning and Drying

Inspect the Speedglas™ Welding Helmet following the inspection procedures in the *User Instructions*.

Some cleaning and/or sanitizing products can pose health risks if they come into contact with a user's skin. Customers must ensure that their PPE cleaning and sanitization procedures are within established safe levels and do not result in exposures to cleaning/sanitizing chemicals at levels of capable of causing adverse health effects.

Cleaning and Fabric Components

Refer to specific Speedglas™ Welding Helmet User Instruction for fabric component cleaning instructions. Use of disinfecting solutions on fabric components is not recommended due to potential damage and loss of fire-retardant properties.

User Instructions

- [3M™ Speedglas™ Auto-Darkening Welding Helmet 9100 Series User Instruction \(PDF, 7.8MB\)](#)
- [3M™ Speedglas™ Welding Helmet, 9100 FX Series User Instruction \(PDF, 3.9MB\)](#)
- [3M™ Speedglas™ Auto-Darkening Welding Helmet SL User Instructions \(PDF, 2.6MB\)](#)
- [3M™ Speedglas™ Auto-Darkening Welding Helmet Series 100 User Instructions \(PDF, 2.2MB\)](#)
- [3M™ Speedglas™ Welding Helmet Series 9002NC with AutoDarkening Filter User Instructions \(PDF, 1.6MB\)](#)
- [3M™ Speedglas™ Welding Helmet 9100 QR User Instructions \(PDF, 1.8MB\)](#)
- [3M™ Speedglas™ Heavy-Duty Welding Helmet G5-01 User Instructions \(PDF, 14.2MB\)](#)
- [3M™ Speedglas™ Welding Helmets 9100 Air and 9100 FX-Air User Instructions \(PDF, 8.3MB\)](#)
- [3M™ Speedglas™ Welding Helmet 9100 MP User Instruction \(PDF, 5.7MB\)](#)

Glossary of Terms

Below is a glossary of terms used in this document^{5, 6}:

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 adversely affect the disinfecting process.

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.

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

- 1) Guideline for Disinfection and Sterilization in Healthcare Facilities, 2008; updated 2019. 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](https://www.cdc.gov/infectioncontrol/pdf/guidelines/disinfection-guidelines-H.pdf)
- 2) Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease (COVID-19) in Healthcare Settings. Coronavirus Disease (COVID-19). [https:// www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html](https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html)
- 3) List N. EPA's Registered Antimicrobial Products for Use Against Novel Coronavirus SARS-CoV-2, the Cause of COVID-19. United States Environmental Protection Agency. 03/03/2020. [https:// www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2](https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2)
- 4) Hard-surface disinfectants and hand sanitizers (COVID-19): List of hard-surface disinfectants. Health Canada, Government of Canada. [https:// www.canada.ca/en/health-canada/services/drugs-health-products/disinfectants/covid-19/list.html](https://www.canada.ca/en/health-canada/services/drugs-health-products/disinfectants/covid-19/list.html)
- 5) Rutala, WA. American Journal of Infection Control. APIC Guideline for Selection and Use of Disinfectants. Vol. 24, No.4, pp. 313-342, August 1996.
- 6) Rutala, WA. CDC. Guideline for Disinfection and Sterilization in Healthcare Facilities. 2008.

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Customer Service: 1-800-328-1667
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In Canada

Technical Service: 1-800-267-4414
Customer Service: 1-800-364-3577
[3M.ca/Safety](https://www.3m.ca/Safety)

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