

Product Cleaning Guidance

SCBA Second Stage Regulator



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Based on guidance from the United States Centers for Disease Control and Prevention (CDC) regarding COVID-19, the following cleaning methods may be used for SCBA second stage regulators.

A Note on MSA G1 Design and Regulator Cross Contamination

Cross-contamination occurs when one person receives infectious materials such as respiratory secretions from another person by touching a contaminated surface or breathing contaminated air. Many fire departments are providing individual-issue facepieces to firefighters to mitigate cross-contamination from one user to another, however that alone does not provide complete protection against cross-contamination. Second stage regulators that are shared among individuals may also serve as a source for cross-contamination.

In order to reduce the potential for cross-contamination, MSA's G1 Facepiece and G1 Second Stage Regulator were designed with the following features:

- The G1 Facepiece incorporates a separate ambient air port that is used for both inhalation and exhalation when the facepiece is worn without the second stage regulator connected.
- When the second stage regulator is connected, the ambient air port is sealed and separated by an O-ring. This O-ring seal prevents airflow supplied by the second stage regulator from contacting the ambient air port.
- The G1 facepiece utilizes an inhalation check valve when the second stage regulator is connected, while the exhalation valve diverts air outside of the facepiece. This design feature directs potentially contaminated exhaled air away from the second stage regulator.

To minimize the impact of SCBA use on these design features, users must follow all use, inspection and testing as well as maintenance schedules outlined in the G1 Operating Manual and subsequent CARE Manuals. Applicable sections within the G1 Operating Manual include: Visual Inspections, Functional Tests, Donning, During Use, Cold Weather Operations, After Use, and Recommendations for Cleaning and Disinfecting.

If using an MSA SCBA other than the G1 or suspect that the G1 second stage regulator may have been exposed to COVID-19 while disconnected from the G1 facepiece, follow the disinfecting instructions below. **Note:** *The following disinfecting instructions recommend using Confidence Plus 2, however, if Confidence Plus 2 is not available then an alternative disinfectant may be used. See the Product Cleaning Guidance section of this document for acceptable alternatives.*

1. Depress the regulator release buttons to ensure the regulator is shut off.
2. Rotate the bypass knob clockwise to ensure the regulator bypass is shut off.
3. Pressurize the SCBA and regulator. The regulator must be pressurized during the entire washing and disinfecting procedure.

4. Prepare a solution of Confidence Plus 2 Germicidal Cleaner (US Part No. 10009971) and warm water (90-110 °F) in accordance with the Confidence Plus 2 instructions.
5. Submerge the regulator in the Confidence Plus 2 solution for the duration in accordance with the Confidence Plus 2 instructions.
6. Use a soft-bristle brush to clean the external surfaces of the regulator.
7. While submerged, agitate the regulator in the Confidence Plus 2 solution to further loosen dirt and debris.
8. Remove the regulator from the Confidence Plus 2 solution. Orient and shake the regulator lightly to remove excess Confidence Plus 2 solution.
9. Rinse the regulator in clean warm water (90-110°F). Ensure that both the external and internal regulator surfaces are rinsed.
10. Orient and shake the regulator lightly to remove excess water from rinsing. Use a clean lint-free cloth to remove excess rinse water from external regulator surfaces.
11. Open the regulator bypass for 3-5 seconds to remove excess water from the regulator valve assembly. Rotate the bypass knob clockwise to shut off the regulator bypass.
12. Activate the regulator for 3-5 seconds to remove excess water from the regulator valve assembly by depressing the purge cover (if equipped) or by applying a negative pressure to the regulator outlet (to simulate a first breath activation). Depress the regulator release buttons to shut off the regulator.
13. Depressurize the SCBA. Open the regulator bypass to depressurize the regulator. Rotate the bypass knob clockwise to shut off the regulator bypass.
14. Allow the regulator to dry completely prior to use. Drying time will vary depending on ambient air temperature and humidity. If a drying cabinet is used, ensure that the temperature does not exceed 120°F.

Moisture can cause problems in the SCBA if it freezes. However, moisture can cause freezing problems even if the surrounding air is above freezing. Air flowing from the cylinder through the pressure reducer and regulator decreases from cylinder pressure to close to atmospheric pressure very quickly. This causes the air to expand and creates a cooling effect. Although the surrounding temperature may be warmer than 32°F (0°C), the temperature inside the regulator may be lower.

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WARNING!

- Before going into a hazardous environment, make sure there is no water, moisture, or dampness on or in any of the SCBA components. Any moisture on or in the SCBA components can freeze and result in a malfunction of the SCBA. Make sure all components operate correctly.
- Before going into a hazardous environment, make sure there is no water or ice on the inner surfaces and components of the regulator, regulator buttons, and bypass valve. Make sure the buttons and bypass valve operate correctly.
- Do NOT use a regulator that has water contamination on the inner surfaces or components. Remove the regulator from service and dry all surfaces and components fully. Make sure all regulator components are fully dry before returning the regulator to service.

Failure to obey these warnings can result in serious personal injury or death.

Routine Cleaning

Before using a disinfectant, conduct routine cleaning in accordance with the user manual to remove dirt and other contaminants.

Product Cleaning Guidance

- For COVID-19, CDC recommends the use of cleaning products with EPA-approved emerging viral pathogens claims. CDC refers to List N on the EPA website (<https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>) for EPA-registered disinfectants that meet this guidance.
- MSA's Confidence Plus 2 cleaner is included on List N based on its EPA Reg. No., which begins with 47371-130. The active ingredients in Confidence Plus 2 are quaternary ammonium compounds, which are compatible with MSA's products.
- Other disinfectants on EPA List N may be used if they have an EPA Reg. No. starting with 47371-129, 47371-130, 47371-131, or 47371-192. Note that EPA's List N is organized by EPA Reg. No. and does not identify every qualifying product by name. The American Chemistry Council's Center for Biocide Chemistries maintains a list of products that meet EPA's criteria for COVID-19 (<https://www.americanchemistry.com/Novel-Coronavirus-Fighting-Products-List.pdf>).
- In Canada, products from Health Canada's list of disinfectants for use against COVID-19 may be used if they have an equivalent composition (<https://www.canada.ca/en/health-canada/services/drugs-health-products/disinfectants/covid-19/list.html>).
- In European markets where Confidence Plus 2 or other EPA-registered disinfectants may not be available, alternative cleaning products that are water-based and have equivalent

concentrations of quaternary ammonium compounds include EW80 mat disinfectant, Ecolab Incidin Rapid, and Ecolab Sekumatic FDR.

- It is important to follow the cleaning product manufacturer's instructions, including contact time to achieve disinfection. EPA List N also provides guidance on contact time.
- After using disinfectants it is recommended that you fully rinse the product to eliminate any residue that may impact the product over time.

Caution Regarding Use of Other Chemicals with MSA Respiratory Products

- The CDC has provided guidance on disinfection using a solution of 2% bleach in water (<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cleaning-disinfection.html>) and the EPA's List N includes a variety of other cleaning products, many of which have different active ingredients than Confidence Plus 2 (e.g., free chlorine, sodium or potassium hypochlorite, chlorine dioxide, peroxides, etc.). Such products may be used to disinfect MSA respiratory protection products if no other cleaning products are available that meet the criteria identified in this memo. Users are cautioned, however, that repeated longer-term use of these solutions may degrade some components of MSA products. Users must maintain stringent pre-use inspection procedures as outlined in the user manual to ensure the continued integrity of the products following repeated use of these solutions.

Please Note

MSA relies on the expertise of CDC, EPA, and the other cited authorities, and has not evaluated the effectiveness of these cleaning agents against COVID-19. To the extent the guidance in this Bulletin may go beyond the information in your user manual, it applies only in the context of the COVID-19 public health emergency.

Personal protective equipment (PPE) provides limited protection and may help to reduce exposure to biological agents and the risk of viral infection but **IMPORTANTLY IT DOES NOT ELIMINATE** the risk of exposure, infection, illness, or death, including with respect to SARS-CoV-2/COVID-19. MSA does not warrant the efficacy of any of its PPE products, or of the information or products in this Bulletin, in preventing the spread and/or contraction of coronaviruses. It is your responsibility to determine what cleaning products and methods are suitable for your intended use and consistent with guidelines from your employer and the relevant health authorities. MSA disclaims liability 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.

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The situation with COVID-19 is rapidly evolving. As such, this guidance may be updated as circumstances warrant. Please visit MSA COVID-19 Resource Center (<https://us.msasafety.com/coronavirus>) to ensure that you have the latest version. Furthermore, organizations like the CDC are providing updated information and guidance as it becomes available. For the most-up-to date information on COVID-19, you should regularly consult guidance being published by national and international organizations, such as the CDC, the National Institutes of Health (NIH), the World Health Organization (WHO), the European Centre for Disease Prevention and Control (ECDC), and/or your local health authority. Guidance on COVID-19, including information on actions needed to prevent, control, and manage contact with the virus, is available at the following websites:

US CDC	https://www.cdc.gov/coronavirus/index.html
US NIH	https://www.nih.gov/news-events/news-releases/nih-officials-discuss-novel-coronavirus-recently-emerged-china
WHO	https://www.who.int/health-topics/coronavirus
ECDC	https://www.ecdc.europa.eu/en/coronavirus
HEALTH CANADA	https://www.canada.ca/en/public-health/services/diseases/coronavirus-disease-covid-19.html

Note: This Bulletin contains only a general description of the products shown. While product uses and performance capabilities are generally described, the products shall not, under any circumstances, be used by untrained or unqualified individuals. The products shall not be used until the product instructions/user manual, which contains detailed information concerning the proper use and care of the products, including any warnings or cautions, have been thoroughly read and understood. Specifications are subject to change without prior notice.

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