

Product Cleaning Guidance

Respiratory Protection Equipment



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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 Respiratory Protection Equipment, inclusive of Self Contained Breathing Apparatus, Air Purifying Respirators, Powered Air Purifying Respirators, and related accessories (adapters, cylinders, etc.).

Routine Cleaning

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

Disinfection 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 with quaternary ammonium compounds as their active ingredients may be used if they appear on EPA List N and 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 to the products listed above (<https://www.canada.ca/en/health-canada/services/drugs-health-products/disinfectants/covid-19/list.html>).
- 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 or wipe down the product to remove 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.

Advice Regarding Filter Cartridges

Cartridge exterior. The exterior of the cartridge body may be wiped down using one of the cleaners described above. Care must be taken to ensure that liquid disinfectant solution does not touch the surface of the filter media itself. With all cleaning products, follow the manufacturer's instructions, including contact time to achieve disinfection.

Filter media and changeout schedule. At this time there is no recommended method for disinfecting the filter element.

CDC has provided guidance for healthcare settings regarding cartridge reuse. According to CDC, conventionally, filter cartridges are generally discarded after an authorized use. On an interim emergency basis during contingency and crisis emergency use, CDC advises that:

- Filter cartridges (except for unprotected disc type, i.e., pancake style) may be used for an extended period, if the cartridge is disinfected after each patient interaction provided the disinfectant or cleaning agent does not come in contact with the filter media; and
- Filter cartridges must not be dipped or immersed in a cleaning or disinfection solution because this may damage or render the filter material ineffective. When using a cleaning or disinfectant wipe on the external surface of a filter cartridge, users should avoid contact with the filter media on the inside of the cartridge.

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In addition, and subject to the CDC guidance above, the NIOSH Guide to the Selection and Use of Particulate Respirators (Publication Number 96-101) sets out different changeout requirements based on the type of particulate respirator:

... The service life of all three categories of filters efficiency degradation (i.e., N-, R-, and P-series) is limited by considerations of hygiene, damage, and breathing resistance. All filters should be replaced whenever they are damaged, soiled, or causing noticeably increased breathing resistance (e.g., causing discomfort to the wearer)... R- or P-series filters can be used for protection against oil or non-oil aerosols. N-series filters should be used only for non-oil aerosols. Use and reuse of the P-series filters would be subject only to considerations of hygiene, damage, and increased breathing resistance. Generally, the use and reuse of N-series filters would also be subject only to considerations of hygiene, damage, and increased breathing resistance. R-series filters should be used only for a single shift (or for 8 hours of continuous or intermittent use) when oil is present.

Shelf Life of Filter Cartridges

All particulate-only cartridges and filters have an unlimited shelf life. This includes Flexi-Filters, Comfo® and Advantage® style P100 cartridges. Also, Type HE PAPR cartridges that are particulate-only have unlimited shelf life. These include Optifilter and OptimairTL Type HE cartridges.

Chemical and Combination cartridges for all APR and PAPR have a recommended shelf life of 3 years. Please note that these cartridges do not have an 'expiration date' printed on them.

Gas mask canisters, including industrial gas masks, CBRN and Riot control canisters have an expiration date printed on the cartridge label. Generally these are 5 year expiration. While the P100 or particulate performance efficacy of these types of canisters may remain intact following expiration, MSA cannot advocate use beyond the expiration date.

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.

Please note that Riot Control Canisters, CBRN Canisters, and Combination Chemical/Particulate Respirator Cartridges (GMA-P100, GMB-P100, GMC-P100, GMD-P100, GME-P100, GMF-P100 and GMI-P100) generally are limited use cartridges and have required changeout schedules. These types of cartridges, including chemical-only cartridges that are used as holders for N95 or R95 prefilters, generally are to be discarded after use but may be cleaned and reused consistent with the CDC's limited emergency guidance described above **if they are used only for particulate level protection**. If using a chemical or combination cartridge in this manner, users are advised to mark the cartridge in such a way to ensure that it will be used only for particulate level protection and not for filtration of gases or vapors.

Please Note

MSA relies on the expertise of CDC, EPA, and the other cited authorities, and has not evaluated the effectiveness of the above-described 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. You must 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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