Cleaning and Disinfection of Personal Protective Equipment (PPE)
Tips for Non-Healthcare Workplaces

Description

Note this document contains general information for non-healthcare workplaces. Some workplaces may have additional considerations beyond what is covered in this bulletin such as product contamination considerations (e.g. pharmaceutical and food and beverage) which may trigger special cleaning and disinfection needs.

When PPE is intended to be reused, equipment cleaning and disinfection may be required by regulations, needed for hygiene, and/or implemented to help prevent transmission of infectious disease. As a best practice, it is recommended that each employee be provided their own set of PPE, but where disinfection is desired it is important to follow both cleaning and PPE product manufacturer’s instructions. Following are some general considerations for cleaning and disinfection of 3M PPE.

US Regulatory Requirements

In the US, regulatory authorities such as the Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency (EPA) have some requirements regarding disinfection.

EPA regulates disinfectant and sanitizer products

The EPA regulates surface disinfectants or sanitizers under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and formulated chemical products with antimicrobial claims must be EPA Registered. The product label must list the EPA Registration Number, and the EPA-approved label can be retrieved using the Pesticide Product Label Database at: https://iaspub.epa.gov/apex/pesticides/f?p=PPLS:1

The EPA’s regulatory process ensures that all registered disinfectant products legally sold in the United States include directions for use which, if followed, will allow a product to carry out its intended function without resulting in unreasonable adverse effects on the environment. Any time you use an EPA-registered disinfectant or sanitizer, you should read the product label and follow the directions, including the method of application.

In general, the type of the microorganism influences the level of disinfectant needed. Low-level disinfectants are considered to have general efficacy against easier-to-kill bacteria, while a higher level may be needed for harder-to-kill microorganisms. It should also be noted that in some cases, the same disinfectant formulation can be used for harder-to-kill microorganisms if the contact time (how long the surface needs to stay wet with disinfectant) is lengthened. This general information, as well as the EPA-approved claims for a disinfectant product, can be used to make professional judgments about appropriate surface disinfection products as part of the risk assessment process.
OSHA regulates workplace health and safety


Non-Regulatory Guidance

Other guidelines and standards can be used to help determine appropriate cleaning and disinfection practices, including those from the Centers for Disease Control and Prevention (CDC). As an example, for COVID-19 there is risk assessment guidance from U.S. OSHA to help employers plan their infection control strategies, including disinfection, at https://www.osha.gov/SLTC/covid-19/controlprevention.html. CDC also has tools related to cleaning and disinfection at https://www.cdc.gov/coronavirus/2019-ncov/community/cleaning-disinfecting-decision-tool.html. Employers also should consider their local public health authority guidance and requirements when determining site-specific procedures for cleaning and disinfecting PPE.

Tips for keeping your PPE in working order when disinfecting:

- **Always review and follow the product User Instructions prior to cleaning and disinfection of PPE.**
- Adhere to, but don’t exceed the contact time for the intended disinfectant effectiveness.
- Rinse with clean water and wipe with a clean cloth after disinfection to thoroughly remove disinfection solution and reduce the possibility of user irritation and premature degradation of equipment.
- Care should be taken that the filter media does not come in contact with the cleaner.
- Inspect all PPE components following each disinfection procedure and prior to re-use as PPE may become damaged over time with prolonged or extended use of disinfecting products. If damage is discovered, remove from service and discard or repair as appropriate following the guidance in the PPE product User Instructions.

Some disinfectant formulations may be more compatible with your PPE materials of construction than others. Your disinfectant or PPE manufacturer may have additional information on compatibility, but in general you may want to consider:

- Use a disinfectant with the efficacy (kill claims) you need but not a higher efficacy level. For example, if a low-level disinfectant will meet the infection control need, use that instead of an intermediate or high-level disinfectant.
- Use a neutral pH disinfectant if it meets the efficacy need, rather than an acid or alkaline pH product. For example, use a neutral “quat” rather than an alkaline or acid “quat” disinfectant.
- Consider using a different disinfectant active ingredient if it is more compatible, such as a peroxide disinfectant instead of a “quat” disinfectant.

3M Resources

- 3M Technical Bulletin - Cleaning and Disinfecting 3M Reusable Elastomeric Half and Full Facepiece Respirators following Potential Exposure to Coronaviruses
- 3M Technical Bulletin - Cleaning and Disinfecting 3M Powered Air Purifying Respirators following Potential Exposure to Coronaviruses
- 3M Technical Bulletin - Cleaning and Disinfecting 3M™ Scott™ Reusable Full Facepiece Respirators Following Potential Exposure to Coronaviruses
3M Technical Bulletin - Cleaning and Disinfecting 3M™ PELTOR™ Protection & Communication Solutions following Potential Exposure to Coronaviruses

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

3M Technical Bulletin - Cleaning and Disinfecting 3M™ Versaflo™ M-Series Headgear Following Potential Exposure to Coronaviruses

3M Frequently Asked Questions - Respiratory Protection FAQ – First Responder Respirator (FRR)

3M Frequently Asked Questions - Disinfecting Fall Protection Equipment - COVID-19 Concerns