USA Dust Guard

USAdustGuard.com • 800-388-2232

Cleaning / Maintenance
GVS Elipse
Re-Useable Respirator

Health Care Disinfection of Reusable Elastomeric Respirators
Daily & Pandemic Condition Care

When assigned a Re-Useable Respirator, it is a Personal Protective piece of Equipment (PPE) and it must be treated as such. It needs to be cleaned daily to be able to supply the level of protection that it can. GVS Filtration, OSHA and the National Institute for Occupational Safety and Health (NIOSH) all have guidelines for cleaning and disinfecting respirators. The following is provided as a reference as to how an elastomeric respirator may be maintained and disinfected to preserve its useful life.

RESPIRATOR INSPECTION - prior to each use it must be inspected to ensure it is in good operating condition. The respirator must be repaired or replaced if there are damaged or defective parts. Various parts for the GVS Respirators are available at USA Dust Guard.

INSPECTION PROCEDURE:

1. Check the face piece and inhalation valve for signs of distortion, cracking, tearing or dirt.
2. Make sure that the head straps have good elasticity and the connection clips are intact.
3. Examine all parts for signs of wear or cracking including the filter gaskets and that the protective grill covers are in good condition.
4. Remove the exhalation valve cover to inspect the exhalation valve for signs of wear, cracking, distortion and dirt. Re-secure the exhalation valve cover.
5. Inspect the lens of goggle face respirators for any damage that may impair vision or its performance.

FACE PIECE CLEANING - recommended after each use. Radians Respirator Cleaning Wipes #RW-100 are an excellent way to clean the face piece until proper cleaning, but they should never be considered as the main means of cleaning or disinfecting.

Respirators must be thoroughly cleaned at the end of each day. A suggested method is as follows:

- Remove filters from the face piece
- Clean face piece (excluding filters) by immersing in a warm cleaning solution with the water temperature not exceeding 122º F, and scrub with soft pad until clean. Add neutral detergent if necessary. Do not use cleaners containing lanolin or other oils.
- Disinfect the face piece by soaking in a solution of quaternary ammonia disinfectant of dilute sodium hypochlorite (30 ml household beach in 7.5 L of water) or another suitable disinfectant.
- Rinse in fresh, warm water and air dry in a clean non-contaminated area.
- DISH WASHER SAFE - As another option, the face piece can be cleaned in a dish washer. However, it cannot be left to dry during the dishwasher's drying cycle (must be removed and allowed to air dry.)

GVS P100 HESPA PLEATED FILTER - 20, 50, 100 Times Longer Life vs. an Activated Charcoal Filter

CHARACTERISTICS of an ACTIVATED CHARCOAL FILTER (photo, right) - airborne contaminates are drawn or magnetize to the activated charcoal; the filter, by its physical properties, captures and contains the particulates. Even when the respirator is not being worn, the activated charcoal continues to attract dust, bacteria and moisture which prematurely contaminates the respirator's hygiene and shortens the filter's life.

GVS P100 HESPA PLEATED FILTER (photo, right) - No Activated Charcoal, Water Resistant, Non-Electrostatic

- *without activated charcoal or non-electrostatic, airborne pariculates are not drawn to the filter*
- synthetic media, pleated filter provides assure the user of low breathing resistance for less fatigue
- P100 rating - as distinguished by its magenta color - assures the highest level of filtration protection. Captures 99.97% of 0.3 micron airborne particles including asbestos, silica, spreading of insecticides by spraying, spores, bacteria
- pleats on the filter increase the filter's surface area to capture volumes of airborne particulates without increasing the filter's physical size.

FILTER CLEANING - GVS P100 HESPA PLEATED FILTER

- filter can be wiped with a damp cloth, disinfectant wipe or gently cleaned with a HEPA vacuum clearner
- cannot be submerged in water nor any type of disinfectant solution as it will degrade the filter media.

DISINFECTANT TO KILL THE COVID-19 VIRUS FROM THE GVS RESPIRATOR

As of now there is no specific disinfectant available that specifically claims to kill SARS-CoV-2, the virus that causes COVID-19. While SARS-CoV-2 is believed to spread primarily through person-to-person breathing and sneezing, the virus is more than likely to spread on surfaces too.

WHAT DO WE KNOW - Enveloped viruses, like SARS-CoV-2, rely on a protective lipid coating. These are the easiest to deactivate with its "flimsy shell." Alcohol-based products disintegrate the protective lipids and quaternary ammonium, a disinfectant commonly used in health-care and food-service industries, is able to attack the lipid structures and thwart its infection. Bleach and other potent oxidizers will also break down the virus's essential components. The EPA's list of presumed disinfectants that are effective against SARS-CoV-2 contain dozens of anti-microbial products including ready-to-use sprays, concentrates and wipes. Each has been shown to be effective against a variety of non-enveloped virus which are considered harder to kill than the enveloped variety.

CONTACT TIME - for disinfectants to work, they need contact time which ranges from 30 seconds to 10 minutes. Different ones require different amounts of time to effectively kill a particular germ or virus. Wiping them off too soon might clean the surface without disinfecting it.

IN A STUDY - spray-and-wipe products were shown that they are wiped-up to soon or left to air dry before they could disinfect the surface. Disinfecting wipes won "hands-down."

BEST SUGGESTION TO KILL THE COVID-19 VIRUS FROM THE RESPIRATOR & FILTERS

- Each Elipse respirator includes a P100 filter set
- Purchase (6) additional filter sets for each day of the week
- Seal each filter set in a Tupperware® container, labeled Sunday - Saturday
- Studies have shown, when COVID-19 was applied to cardboard, plastic and stainless steel - and sealed in an airtight container - the virus survived on those surfaces for a few hours and up to several days.