



Cleaning Guidelines for DuPont™ Tychem® garments for COVID-19

According to the Centers for Disease Control and Prevention (CDC), the recommended method to remove contamination to prevent the spread of Coronavirus Disease 2019 (COVID-19) from garments when working with a case of laboratory-confirmed COVID-19 or a person under investigation is laundering and drying per instructions from the clothing manufacturer.

<https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/cleaning-disinfection.html>

CDC defines cleaning and disinfecting as follow:

Cleaning refers to the removal of germs, dirt, and impurities from surfaces. Cleaning does not kill germs, but by removing them, it lowers their numbers and the risk of spreading infection.

Disinfecting refers to using chemicals to kill germs on surfaces. This process does not necessarily clean dirty surfaces or remove germs, but by killing germs on a surface *after* cleaning, it can further lower the risk of spreading infection.

DuPont™ Tychem® garments are designed as Multiple Use, Single Exposure Disposable garments based on chemical contamination exposure and permeation from the resultant chemical contact. Tychem® 2000 and other Tychem® fabrics with taped seams have been tested and have passed the requirements of ASTM Standards F1670 and ASTM F1671, the recognized blood and viral penetration test methods in North America, respectively.

COVID-19 is a biological viral contaminate, therefore, causing surface contamination; consequently, the exterior of Tychem® garments are able to be cleaned, disinfected and reused a limited number of times for COVID-19 applications. (*)

- For cleaning use warm water, mild dishwashing liquid and a soft brush to remove any dirt from exterior surfaces.
- As per CDC guidelines for disinfection, diluted household bleach solutions, alcohol solutions with at least 70% alcohol, and most common EPA-registered household disinfectants should be effective to disinfect exterior surfaces.
- [Products with EPA-approved emerging viral pathogens claims](#) are expected to be effective against COVID-19 based on data for harder to kill viruses. Follow the manufacturer's instructions for all cleaning and disinfection products (e.g., concentration, application method and contact time, etc.). From this list, diluted hydrogen peroxide or sodium hypochlorite (house-hold bleach) can be used to disinfect Tychem® garments.
- Thoroughly rinse the garments with clean, fresh water and allow to air-dry.

If the interior of the garment is suspected of being contaminated, DO NOT attempt to clean, disinfect and reuse the garment; handle and dispose of the garment according to all applicable regulations.

(*) NOTE: In the absence of data, DuPont is unable to provide guidance on the number of times a garment can be safely reused. It is the responsibility of the safety professional in charge to determine that a garment can be safely reused.

Retire Tychem® garment if it fails to pass inspection or the garment is altered, abraded, cut, torn, punctured or otherwise breached. Follow manufacturers instruction for storage and inspection.

Garment Inspection Steps:

1. Lay the garment on a clean, smooth surface.
2. The inspection should include all areas of the suit: body, visor (if present), and gloves (if present).
3. Use a flashlight inside the suit to examine for holes, cuts, or tears. Confirm that any suspected visual imperfection is actually a void by using a small amount of water to confirm penetration. NOTE: For taped seam garments, visible stitch holes which are covered by seam sealing tape do not constitute a defect.
4. Examine garment seams. For taped seam garments, look for areas where seam tape has lifted away from the suit or where seam tape does not fully cover stitch holes. For bound seam garments, look for areas where the binding (top) fabric piece is missing or not fully attached. For serged seam garments, look for areas where the sewing thread is missing or not fully attached.
5. Examine the entire garment for signs of damage. A breach, rupture, or hole of any component of the suit is cause for rejection. Note that for taped seam garments, the fabric, visor (if present), gloves (if present), and seam areas may have visual blemishes that do not affect barrier performance. Such blemishes can include areas adjacent to the seam tape that appear to be dull, white, or frosted.
6. Examine the garment visor (if present) to ensure it offers a clear visual field.
7. Examine the garment gloves (if present) to ensure that they are in good condition and properly attached to the suit. Gently pull on the gloves to ensure that they are firmly attached to the suit. NOTE: You can potentially damage the gloves by pulling with excessive force.
8. Examine the garment zipper and zipper cover (if present) to make sure they are in good working order. Operate the zipper. Lubricate the zipper using paraffin wax, if needed. Engage the hook and loop tape (if present) on the zipper storm flap(s) to ensure appropriate adhesion. If the garment has double sided adhesive tape on the storm flap(s), ensure that there is tape along the length of each flap; do not remove protective tape covering until the suit is donned for use.
9. Examine any garment snaps, etc. to ensure they are in good working order.
10. Examine elastic (if present) to ensure it is not damaged.
11. Examine garment labels to ensure they are attached and are legible.

References:

Centers for Disease Control and Prevention (CDC)

<https://www.cdc.gov/coronavirus/2019-ncov/index.html>

EPA-registered disinfectants

<https://www.americanchemistry.com/Novel-Coronavirus-Fighting-Products-List.pdf>

ASTM F1670

<https://www.astm.org/Standards/F1670.htm>

ASTM F1671

<https://www.astm.org/Standards/F1671.htm>

*This information is based on technical data DuPont believes to be reliable. It is subject to revision as additional knowledge and experience are gained. It is not intended as a substitute for any testing you may conduct to determine for yourself the suitability of our products for your particular purpose. Since conditions of use are outside the Company's control, **DuPont makes no warranties, express or implied, and assumes no liability in connection with any use of this information.** DuPont™ the DuPont Oval logo and all products denoted with ® or ™ are trademarks or registered trademarks of DuPont de Nemours, Inc. or its affiliates.*