Cleaning the Respirator

Because the cleaning procedures involve the use of liquids, respirators stored or used at cold temperatures must be warmed before cleaning. Respirators being used at cold temperatures after cleaning must be completely dry.

To clean the respirator

1. Using a damp sponge, wipe any accumulated dirt from the exterior of the respirator.

   **NOTE**
   The light sensor for the HUD brightness control is located on the front of the remote gauge housing. Be sure to clean the front of the remote gauge housing to enable proper functioning of the sensor.

2. Clean the facepiece and mask-mounted regulator as described in “Cleaning the Facepiece” on page 42 and “Cleaning the Mask-Mounted Regulator” on page 44.

   You can remove the shoulder harness and waist pad assemblies for decontamination or laundering. See “Chapter 2: Soft Goods Assembly & Disassembly” on page 25 and “Cleaning the Shoulder Harness and Waist Pad” on page 47.

Cleaning the Facepiece

**CAUTION**

Remove any 3M Scott Sight In-Mask Display (IMD) components prior to cleaning the facepiece. IMD components are factory-sealed to protect the optics and electronics from dirt and moisture. Clean these components when necessary using a cloth dampened with a solution of mild detergent and water. If the IMD and/or the mask-mounted thermal imaging camera (TIC) assembly has been exposed to potentially hazardous materials, decontaminate in accordance with established procedures.

You will need the following supplies:

- Sanitizing or disinfecting cleaner. 3M recommends Georgia Steel & Chemical Co., Inc., Fresh-Gear Disinfectant (FG350-GC).

   **NOTE**
   3M does not guarantee the efficacy of the recommended disinfectant for specific infectious pathogens.

   **CAUTION**
   When using the recommended cleaning products, follow all of the manufacturer’s instructions. Improper use or handling of these products may result in damage to the facepiece.
If a recommended disinfectant is not available, you can disinfect the facepiece using one of the following solutions:

- **Hypochlorite solution** (50 ppm of chlorine) made by adding approximately one milliliter (1 mL) of laundry bleach to one liter (1 L) of water at 110° F / 43° C

- **Aqueous solution of iodine** (50 ppm iodine) made by adding approximately 0.8 mL of tincture of iodine (6–8 grams ammonium and/or potassium iodide/100 cc of 45% alcohol) to 1 L of water at 110° F / 43° C

- Spray bottle (for the sanitizing or disinfecting cleaner)

- Drinking (potable) water, either from a faucet or in a spray bottle

- Clean, lint-free cloth

- (Optional) Lubricant-free, dry breathing air, maximum 30 psig, for drying the facepiece

---

**CAUTION**

When cleaning the facepiece, do not use the following cleaning products:

- Abrasive cleaners
- Bleach stronger than a 3% solution in water
- Cleaners containing quaternary ammonium compounds other than those recommended by 3M
- Solvents such as acetone, paint and lacquer thinner, benzene, or dry-cleaning fluid.

In addition, do not do the following:

- “Dunk and slosh”
- Polish with paper towels as most paper contains abrasives
- Autoclave or wash in an automatic washer
- Use a vapor degreaser/polisher

---

**To clean the facepiece**

1. Remove the mask-mounted regulator from the facepiece.

---

**NOTE**

A nose cup is designed to be an integral part of the facepiece and does not need to be disassembled for cleaning unless the facepiece is heavily soiled.

2. If the facepiece is heavily soiled, you may have to first wash the facepiece.

- Using a spray bottle, apply a solution of mild soap or detergent in warm water (110° F / 43° C maximum) to the soiled surfaces. Rinse the facepiece with drinking water either from a faucet or in a spray bottle.

- OR-

- Clean the facepiece using 3M™ 504 Respirator Cleaning Wipes.

3. To sanitize or disinfect the facepiece, use a spray bottle to apply the recommended sanitizing or disinfecting cleaner to all surfaces of facepiece. Be sure to cover all surfaces completely with the cleaning solution.

---

**NOTE**

The Kevlar head harnesses are made of porous material. The recommended cleaner may not be effective on porous material.

4. Set the facepiece aside for the required contact time prior to rinsing. **Fresh-Gear Disinfectant requires a 10-minute contact time. The hypochlorite solution and the aqueous solution of iodine require a 2-minute contact time.**
5 Rinse the facepiece with drinking water either from a faucet or in a spray bottle.

6 Shake excess water off the facepiece and dry it with a clean, lint-free cloth or gently blow dry with clean, dry breathing air of 30 psig or less pressure. Do not use shop air or any other air containing lubricants or moisture.

Cleaning the Mask-Mounted Regulator

You will need the following supplies:

- Sanitizing or disinfecting cleaner. 3M recommends a properly diluted hypochlorite solution or aqueous solution of iodine:
  - **Hypochlorite solution** (50 ppm of chlorine) made by adding approximately one milliliter (1 mL) of laundry bleach to one liter (1 L) of water at 110°F / 43°C
  - OR-
  - **Aqueous solution of iodine** (50 ppm iodine) made by adding approximately 0.8 mL of tincture of iodine (6-8 grams ammonium and/or potassium iodide/100 cc of 45% alcohol) to 1 L of water at 110°F / 43°C
- Spray bottle (for the sanitizing or disinfecting cleaner)
- Sponge or soft cloth
- Drinking (potable) water, either from a faucet or in a spray bottle
- (Optional) Lubricant-free, dry breathing air, maximum 30 psig, for drying the regulator

---

**NOTE**

3M does not guarantee the efficacy of the recommended disinfectant for specific infectious pathogens.

---

**CAUTION**

When using the recommended cleaning products, follow all of the manufacturer’s instructions. Improper use or handling of these products may result in damage to the regulator.

---

**CAUTION**

When cleaning the regulator, do **not** use the following cleaning products:

- Bleach stronger than a 3% solution in water
- Cleaners containing quaternary ammonium compounds other than those recommended by 3M
- Solvents such as acetone, paint and lacquer thinner, benzene, or dry-cleaning fluid.

In addition, do **not** do the following:

- “Dunk and slosh”
- Autoclave or wash in an automatic washer
- Use a vapor degreaser/polisher
To clean the mask-mounted regulator

1. Remove the mask-mounted regulator from the facepiece by pulling back on the retaining latch and rotating the regulator one-quarter turn clockwise.

2. Using a sponge or soft cloth and the recommended sanitizing or disinfecting cleaner, wipe the external surfaces of the regulator.

3. Inspect the inside of the regulator assembly through the regulator opening (see Figure 3-1). If excessive dirt or soil is present, forward the regulator assembly to 3M-trained authorized personnel for thorough cleaning.

4. Depress the air-saver/donning switch. Close the purge knob by turning it fully clockwise.

5. Using a spray bottle, apply the recommended sanitizing or disinfecting cleaner to the surfaces of the regulator opening and the immediate area around the opening (see Figure 3-1). Be sure to cover the internal components completely with the cleaning solution.

 NOTE

Follow the user instructions for the recommended cleaner. A specific contact time may be required for sanitizing or disinfecting before rinsing.

6. Set the regulator aside for the required contact time prior to rinsing. The hypochlorite solution and the aqueous solution of iodine require a 2-minute contact time.

7. Using gently running tap water or a spray bottle with drinking water, rinse the regulator inside and out.

8. Shake excess water out of regulator. Completely air dry the regulator before use.

 NOTE

To speed drying of the regulator, gently blow dry with clean, dry breathing air of 30 psig maximum. Do not use shop air or any other air containing lubricants or moisture.
CLEANING & STORING THE RESPIRATOR

9 If the regulator was disconnected from the air supply for cleaning, reconnect and open the purge valve to remove any moisture from regulator spray bar. Close the purge valve.

10 Perform a regulator check after each cleaning by following steps listed in “To perform a regulator check”.

To perform a regulator check

---

**NOTE**
The regulator check is not intended to be a complete functional check of the respirator. Before your next use of the respirator, perform a regular operational inspection as described in “Chapter 1: Inspecting the Respirator” on page 11.

1 Make sure the respirator cylinder is at least 1/2 full to prevent the Vibralert from initiating and obscuring the sound of air flowing from the regulator.

---

**NOTE**
If the cylinder is 1/3 full or less, the Vibralert will initiate. If the Vibralert does not initiate, tag the unit for repair and remove it from service.

---

2 Verify that the air-saver/donning switch is fully depressed.

3 Close the purge knob.

4 Reattach the regulator to the respirator (if removed for cleaning).

5 Slowly open the cylinder valve at least 1 full turn.

6 If you hear air flowing from the regulator, close the cylinder valve and repeat steps 2 through 5. If you still hear air flow, close the cylinder valve fully, tag the unit for repair, and remove it from service.

7 Open the purge valve and observe the air flow from the regulator spray bar. Droplets of water indicate the regulator is not dry. Dry the regulator according to step 8 of “To clean the mask-mounted regulator” on page 45 and repeat the regulator check.