

SAFETY ALERT

November 15, 2022

Use of Manual Liquid Nitrogen Fill Stations

Hazards: Extremely Low Temperatures, Freezing of Skin (Frostbite), Cryogenic Spray

DO NOT USE A LIQUID NITROGEN FILL STATION UNLESS:

- You are included on a WPC Work Activity authorizing you to perform work with cryogenics.
- You have received credit for EHS0170 “Cryogen Safety” training.
- You have received hands-on instruction specific to the fill station being used.

Personal Protective Equipment: Cryogen gloves, safety glasses with side shields, face shield, lab coat or long sleeve shirt, long pants with no cuffs, and closed-toe shoes of impermeable material are required. **Note:** Cryogenic gloves and other PPE will not provide adequate protection from prolonged direct contact to cryogenic liquids. They also don't protect you if they get wet or from prolonged contact with cryo-cooled objects.

1. Check your required personal protective equipment (PPE) prior to use. Do not use any damaged PPE. Put on the required PPE before starting work.
2. Inspect the dewar and fill station hose for any damage or defects.
3. Position the open dewar on the ground under the fill station dispense hose. Secure the dewar to prevent tipping.
4. Insert the fill station dispense hose into the open dewar such that the dewar is stable and can be filled without holding the transfer line or dewar during the fill process. Filling must be a hands-off operation with all PPE in use in the event of a leak in the line or system malfunction.
5. Slowly open the liquid nitrogen fill valve. Adjust the flow rate as necessary to minimize splashing and overflow.
6. Remain within sight of the dewar during the entire filling process.
7. Once the dewar is full, manually shut-off the liquid nitrogen fill valve and wait for all flow to stop.
8. Carefully remove the fill station dispense hose from the dewar. Be alert for any potential cryogenic spray.
9. Report all damaged, malfunctioning or missing equipment immediately to the Building Manager or your Division Safety Coordinator for corrective action.

For further information regarding cryogenics, go to PUB-3000 Chapter 29: [PUB-3000 Chapter 29 Cryogenics](#)

If you have any questions or concerns regarding handling of cryogenics, you can contact the ETA Safety Manager, Ron Scholtz X8137 for assistance.



Example LN2 Fill Station