

Cryogenic Safety



General Safety

- Avoid contact with skin and eyes.
- Never handle with bare hands; use cryogenic gloves. Gloves need to be loose fitting so that they can be readily removed if liquid is splashed into them.
- Do not use or store in confined areas, refrigerators, environmental chambers or rooms without ventilation. A leak or venting from the container could cause an oxygen deficient atmosphere.
- Do not place on tile or laminated counters. It will destroy the adhesive.
- Read the Material Safety Data Sheet for more safety information.



Dry Ice

- Obtain dry ice in the form and size it will be used.
- Never store dry ice in glass or other sealed, air-tight containers or coolers (A pound of dry ice will sublimate into 8.3 cubic feet of carbon dioxide gas in about 1 hour).

Liquid Nitrogen

- Use faceshield when filling dewars.
- Only use containers designed for LN₂ with lids that are vented to allow off gassing (1L LN₂ vaporizes to ~0.7m³ of gas).



Liquid Oxygen

- Keep liquid oxygen containers, piping, and equipment clean and free of grease, oil, and organic materials.

First Aid

- Remove any clothing not frozen to the skin that may restrict circulation to the frozen area. Do not rub frozen parts, as tissue damage may result. Obtain medical assistance as soon as possible.
- Place the affected part of the body in a warm water bath (not to exceed 40° C). Never use dry heat.

See EH&S Policy 1-5:

Compressed Gas and Cryogenic Fluid Handling, Storage and Disposal

<http://www.stonybrook.edu/ehs/policy/campus.shtml>