

HOW TO HANDLE DRY ICE

Carbon Dioxide, Solid is **NOT** considered a Hazardous Substance by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, it is classified as a Dangerous Good for transport purposes under the Department of Transportation (DOT).

Precautions associated with handling dry ice are listed below.

SYMBOLS	TYPES OF HAZARDS
	CONTACT HAZARD At -109 °F (-79 °C), skin contact with dry ice can lead to severe frostbite; skin cells freeze and become damaged very quickly.
	ASPHYXIATION HAZARD Dry ice will sublime (change from solid to gas) at any temperature above -109 °F. This releases potentially substantial volumes of CO₂ (1 lb. solid = 250 liters gas) causing dizziness, headaches, difficulty breathing, loss of consciousness and death. This is especially of concern in nonventilated or confined spaces.
	OVER-PRESSURIZATION HAZARD Due to the rapid emission of large volumes of CO₂ gas, any dry ice that is stored in a closed container can pressurize the container. Given enough time at normal room temperature, such a container may violently rupture if the gas is not able to escape.

DRY ICE PRECAUTIONS

- Perform all work with dry ice in a well-ventilated area and avoid inhalation.
- Avoid skin contact with dry ice as this can lead to frostbite. **NEVER HANDLE DRY ICE WITH BARE HANDS.**
- Use appropriate personal protective equipment (PPE):
 - Use loose-fitting thermally insulated gloves (e.g leather or cloth) to manually handle dry ice. Inspect gloves prior to use.
 - Wear appropriate eye protection including goggles and/or a face shield.
 - Use tongs to handle dry ice when possible.
- **NEVER** store dry ice in a tightly sealed container or any container with a screw-top lid that will not vent.
- **NEVER** dispose of dry ice in a trash can or chemical waste container nor in a sink, toilet, or other fixture.

FIRST AID

- If dry ice meets the skin or eyes, flush the affected area with generous quantities of cold water. Never use dry heat. Splashes on bare skin cause a stinging sensation, but, in general, are not harmful.
- If clothing becomes soaked with liquid, it should be removed as quickly as possible, and the affected area should be flooded with cold water as above.
- Where clothing has frozen to the underlying skin, cold water should be poured on the area, but no attempt should be made to remove the clothing until it is completely free.
- If inhalation of the cold vapors has occurred, move the person to warm, fresh air. In this case, the person may be suffering from frostbite of tissue in their throat and lungs, but also asphyxia.