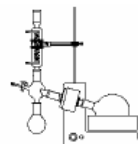




# REMINDER



## Cryogenic Liquids



There are two fundamental properties of cryogenic liquids that present potential hazards:

1. They are extremely cold which presents the possibility of frostbite.
2. Very small amounts of liquid produce large amounts of gas which may present an asphyxiation or other hazard.

<u>Cryogen</u>	<u>Boiling point°C (°F)</u>	<u>Liquid-to-gas expansion ratio</u>	<u>Type of gas</u>
Ar	-186 (-303)	860	Inert
He	-269 (-452)	780	Inert
H <sub>2</sub>	-253 (-423)	865	Flammable
N <sub>2</sub>	-196 (-321)	710	Inert
O <sub>2</sub>	-183 (-297)	875	Oxidizer
CH <sub>4</sub>	-161 (-256)	650	Flammable

Contact with cryogenic liquids or gas can damage the skin or eyes. Never allow unprotected skin to touch objects cooled by cryogenic liquids:

- \* The skin will stick fast and tear the flesh when attempting to free yourself.
- \* Use tongs to withdraw objects immersed in cryogenic liquids

Wear protective clothing:

- \* Protect the eyes. Delicate tissue will be damaged by brief exposures. Goggles are preferred over safety glasses with side shields.
- \* Protect the hands. Loosely fitting insulated gloves are best.
- \* Protect the body. Closed toed shoes with long pants and sleeves should be worn.

Do not cover or plug the venting of gas from containers. This will cause the container to over-pressurize with potentially catastrophic results.

### QUESTIONS?

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