



STALL STREET JOURNAL

College of Engineering Office of Safety

SAFETY STARTS WITH YOU

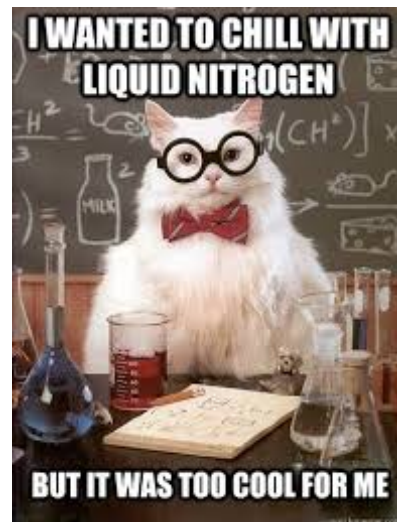
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Liquid Nitrogen Safety



- A full face shield over safety glasses or chemical splash goggles are recommended during transfer and handling of cryogenic liquids to minimize injuries associated with splash or explosion. If the liquid nitrogen spills, you can pull the gloves off quickly, as prolonged exposure to liquid nitrogen can lead to frostbite.
- Avoid handling liquid nitrogen in poorly-vented or small enclosed spaces.
- Prevent cracking and damage to the vacuum insulation system in the Dewar by handling gently. Never use a Dewar with a crack in it.
- Always temper the Dewar before using by slowly adding liquid nitrogen and leaving it for 15 to 30 minutes.
- Remove samples from liquid nitrogen using tongs.
- Never tamper or modify safety devices such as cylinder valves or a regulator of the tank.



If you have questions about liquid nitrogen safety contact COE Safety or UW-EHS

If you have ideas for the Stall Street Journal, contact:
coesafety@engr.wisc.edu

Liquid nitrogen is a cryogenic liquids commonly used in labs. "Cryogenic" means related to very low temperature, Liquid Nitrogen is liquefied under high pressure condition and can expand to a large volume of gas. Hence, if sufficient liquid nitrogen is vaporized so as to reduce the oxygen percentage to below 19.5%, there is a risk of oxygen deficiency which may cause unconsciousness.