



Cryogen Liquid Nitrogen Services

Liquid Nitrogen Safety

PRECAUTIONS WHILE HANDLING LIQUID NITROGEN

1



Treat liquid nitrogen and any object cooled with liquid nitrogen with respect

2



Take care not to allow liquid nitrogen to be trapped in clothing near the skin

3



Wear safety glasses or a face shield when transferring liquid nitrogen

4



Wear gloves when touching any object cooled by liquid nitrogen. Gloves should be loose fitting, so they could be thrown off if liquid were to pour inside them

5



Use only approved unsealed containers. Never pour it into a coffee thermos. Never seal it in any container (it will explode)

6



Never dip a hollow tube into liquid nitrogen; it may spurt liquid

7



Never use in a small poorly ventilated room, and never dispose of liquid nitrogen by pouring it on the floor. It could displace enough oxygen to cause suffocation. Nitrogen gas is colorless and odorless—the cloud that forms when you pour liquid nitrogen is condensed water vapor from the air, not nitrogen gas

8



Do not store liquid nitrogen for long periods in an uncovered container (on the other hand, never totally seal a container). Because the boiling point of oxygen, 90.1K, is above that of nitrogen, oxygen can condense from the air into the liquid nitrogen. If the air over the nitrogen circulates, this liquid oxygen can build up to levels which may cause violent reactions with organic materials; even materials which are ordinarily non-flammable. For example, a severe clothing fire could result from ignition in the presence of liquid oxygen



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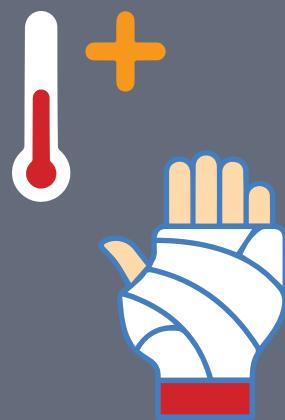
FIRST AID

1



Suffocation: If person seems to become dizzy or loses consciousness while working with liquid nitrogen, move to a well-ventilated area immediately. If breathing has stopped, apply artificial respiration. If breathing is difficult, give oxygen. Call a physician. Keep warm and at rest.

2



Frost bite: If exposed to liquid or cold gas, restore tissue to normal body temperature, 98.6F (37C), followed by protection of the injured tissue from further damage and infection. Remove or loosen clothing that may constrict blood circulation to the frozen area. Call a physician. Rapid warming of the affected part is best achieved by using water at 106F (42C). Under no circumstances should the water be over 112F (44C), nor should the frozen part be rubbed either before or after rewarming. The patient should neither smoke, nor drink alcohol.



REFERRAL PROGRAM

**Cryogen will give you \$50 visa card
and \$50 worth of FREE Nitrogen
for any customer you recommend
and becomes a Cryogen customer!
It's that easy.**



Cryogen

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