



## Hazards



Oxygen depletion and Asphyxiation  
Cold burns

Condensation of oxygen – local oxygen enrichment  
Embrittlement of materials



## Risks

Experimental risk assessment must identify the use of liquid nitrogen and employ suitable control measures for the risks specific to the experiment

## Controls

- Ensure that there is adequate ventilation in the area
- Ensure that there is a suitable escape route if there is an emergency
- Make sure there is oxygen monitoring – available from EHCs
- Avoid lone working
- Minimise the amount of LN<sub>2</sub> used
- Wear suitable PPE: gloves, glasses and closed shoes
- Ensure that LN<sub>2</sub> is not spilt when decanting
- When cooling items, try to maintain the cooling so that boil off is minimised when re-cooling

When transporting LN<sub>2</sub>, use suitable containers in accordance with ADR to be carried by a professional courier. Users are advised not to carry LN<sub>2</sub> in their own vehicles.

## Disposal

LN<sub>2</sub> must be disposed of in a safe way. Ensure that there is a good level of natural ventilation and the area volume is large enough to dissipate the amount of LN<sub>2</sub> for disposal. The local contact will be able to tell you about the arrangements.

## Contact

If you have any questions regarding safety arrangements or risk assessment, contact the SHE group.

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