

Rule and Precautions for Drawing Liquid Nitrogen

1. Training for Drawing Liquid Nitrogen:

- Contact the Staff-in-charge to arrange the training.
- Upon approval, the users need to do the Risk assessment (SPMS) before being authorized to draw the LN₂ by themselves during operation hours.
- Do strictly follow the rules during handling, drawing and transporting LN₂.
- ASK if there is anything you do not fully understand.

2. Safety:

- Always equip with all necessary PPE include: cryogenic face shield, cryogenic gloves and suits, closed-toed shoes and ear plug.
- Use proper containers to draw LN₂.
- Do not fill cylinders/dewars to more than 80% of their capacity.
- Always de-ice the pressure regulator and withdrawal line and valve properly after each top up.
- Always work in pairs.
- Do not allow any LN₂ to touch any part of your body or become trapped in clothing near the skin.
- Do not touch any item that has been immersed in LN₂ until it has warmed to room temperature.
- Never dip a hollow tube into LN₂ because it may spurt the liquid.
- Metals to be used for equipment in LN₂ must possess satisfactory physical properties.
- Report any defective to the staff-in-charge immediately and comment in the record book.
- Any spillage must be cleaned immediately and reported.
- Store LN₂ in well-vented areas. Do not store LN₂ for long periods in an uncovered container or in wet, dirty areas.
- Never park the LN₂ cylinder besides any glass object.
- Only use cargo lift to transfer LN₂. Passengers shall not ride in the lift with any container of LN₂. Make arrangements for someone to send the lift to a receiving person waiting on the desired floor.

3. Emergency contact:

- In case of any technical problems, call Mr Raman in Mechanical Workshop.
- In case of accidents, call Campus Security Division at 67905200 or Ambulance at 995.

4. Borrowing the LN₂ Central Facility key:

Ask the staff-in-charge and properly, fill in the usage charging form in the mechanical workshop. Return the key to the same staff-in-charge immediately after use.

5. Punishment:

Due to the risks involved, all personnel are required to follow the rules and precautions during handling, drawing and transporting LN₂. Any personnel who failed to comply these rules may be **banned to draw the LN₂ from Central Facility**.