

Safety Measures for Performances Involving Liquid Nitrogen

1. Trained Personnel Only

- Only trained and experienced staff should handle liquid nitrogen.
- Performers are trained and familiar with handling cryogenic substances and emergency protocols.

2. Proper Personal Protective Equipment (PPE)

- **Closed-toe shoes** (preferably safety shoes)
- **Lab coat or protective clothing to be used** (to protect skin from splashes)

3. Safe Containers and Tools

- Use only **approved cryogenic containers** — never seal liquid nitrogen in a closed container.
- Tools (funnels, cups, etc.) must be rated for cryogenic temperatures.
- Do not use glass or ceramic vessels that can crack.

4. Safe Distance and Barriers

- Keep a **minimum 1.5–2 meter distance** between the demonstration area and the audience.

5. Well-Ventilated Area

- Always perform in an **well-ventilated space**.

6. No Direct Contact Demonstrations

- Never allow children or the audience to touch or hold any object cooled by or containing liquid nitrogen.
- Avoid tricks where liquid nitrogen is poured on skin or surfaces where it might splash.

7. Avoid Mixing with Other Substances

- Never mix liquid nitrogen with other chemicals without proper containment and safety measures.
- Avoid dry ice or combustion reactions unless you're prepared.

8. Emergency Preparedness

- Keep a **first aid kit** nearby.
- Know the location of the **nearest eyewash station and ventilation controls**.
- Ensure you know what to do in case of **cold burns**.

9. Supervised Setup and Cleanup

- All liquid nitrogen must be removed from the space immediately after the demo.
- Ensure proper disposal (vented slowly into the air — never down drains).

10. Pre-Event Risk Assessment

- Conduct a **risk assessment** and inform venue staff of the procedure.
- Brief all team members on safety procedures before the performance.