

URGENT SAFETY REMINDER

RISKS IN NON-NATURALLY VENTILATED SPACES WHILST USING LIQUID NITROGEN

Reference is made to two fatal incidents (October 2015 and April 2025) which occurred due to asphyxiation caused by leaking liquid nitrogen containers in poorly ventilated areas.

Liquid nitrogen containers may be referred to by different names, including:

- Flask
- Dewars
- PLV
- PLC

This is an urgent safety reminder for all Liquid Nitrogen users, confirming that:

- **Nitrogen flask storage areas must be well ventilated as it can displace oxygen and cause asphyxiation.**
- **If a Nitrogen storage area is not ventilated to open air, the user must:**
 - ✓ **Install continuously operating oxygen monitors in all areas where nitrogen is being used or stored.**
 - ✓ **Ensure monitors are regularly tested and maintained.**
 - ✓ **Ensure staff are trained.**
 - ✓ **Assess and install appropriate ventilation.**
 - ✓ **Vent pressure relief & vent valves to open air where possible.**
- **Nitrogen flasks must not be transported in lifts with people. A lift procedure must be in place.**
- **Cryosaunas must only be operated by trained personnel who understand liquid nitrogen risks and emergency procedures.**
- **Anyone handling liquid nitrogen must wear appropriate PPE.**
- **Only use equipment and containers designed for cryogenic liquids. Pour liquid nitrogen slowly to reduce splashing and thermal shock.**
- **Never trap liquid nitrogen in a container or piping, as pressure can build up and cause rupture.**
- **Avoid contact with liquid nitrogen and never consume it, as it can cause serious injury or death.**

We also remind you of the information in the attached publications regarding the safe use and storage of liquid Nitrogen in liquid containers.

Publications:

- ANZIGA – “Liquid Nitrogen Transport In Elevators”
- CGA – “Liquid Nitrogen Safety Alert”
- CGA – “Safe Use Of Liquid Nitrogen”
- CGA – “Liquid Nitrogen Use in Cryo Therapies”
- EMS JOURNAL, U.S. – “Salon worker dies in cryotherapy accident”
https://www.ems1.com/fatal-incidents/articles/coroner-salon-worker-suffocated-in-cryotherapy-accident-m3Gm9VfVIqe1HJFh/?utm_source=chatgpt.com
- THE GUARDIAN JOURNAL, FRANCE – “Woman dies and another in hospital after cryotherapy session at Paris gym”
https://www.theguardian.com/world/2025/apr/15/woman-dies-hospital-cryotherapy-paris-gym?utm_source=chatgpt.com
- Nitrogen (Refrigerated Liquid) by Supagas PTY LIMITED
<https://sds.chemicalert.com.au/company/10003090>

Please ensure this reminder and the attached publications are promptly circulated to all relevant employees and contractors in your company.