

Users of Cryogenic Gases and Equipment

Personnel using cryogenic gases and equipment require information on the safe use of the gases and equipment in line with current H & S guidelines and Codes of Practice.

Cryogenic Gas User Safety Course

Interactive course on cryogenic gases and equipment with topics including:

- Legislation and Codes of Practice
- Hazards associated with cryogenic liquids, cold, asphyxiation and pressure
- Vessels and dewars
- Decanting procedures

Multiple choice questions are held throughout with a final test requiring 75% pass rate.

Onsite practical – approximately 1 hour in groups of no more than 6 persons

The trainer will demonstrate decanting procedures from a pressurised vessel (less than 1,000 litres) to a dewar and invite learners to practice, to ensure compliance with safe procedures and practice.

(When taken following e-Learning, includes question and answer session which will require an additional 30 minutes per session.)

Onsite Facilities Required

- Suitable training room equipped with screen or monitor & electrical supply
- Access to decanting area with vessel and dewars

To participate in liquid nitrogen practical decanting learners must wear PPE according to local site conditions, the minimum being appropriate shoes, thermal gloves and face/eye protection, no bare arms or legs.

Certification

- PDF Certificate of Achievement on successful completion
- Optional hard copy certificate and credit card style passport available @ £5 per learner.

Certification is valid for 3 years after which refresher instruction is recommended.

Delivery Options	Price (VAT at standard rate applicable)	Duration	Max no. of learners
Onsite classroom & up to 2 practical sessions	An initial £1,195 Plus £90 per learner	Classroom 3 hour Practical 1 hour per session	12
e-Learning	£60 per learner	1.5 hours	Unlimited
Real-time Webinar	An initial £695 Plus £60 per learner	3.5 hours	24
Onsite practical day (following e-Learning or webinar)	An initial £1,195 Plus £30 per learner	up to 3 @ 1.5 hour practical sessions	18

Cryogenic Gas User Course

Aim

To provide information so that the risks associated with the use of cryogenic gases is minimised, resulting in an assured workforce and a safer workplace.

Objective

To aid delegates by providing such information as to enable them to perform a dynamic risk assessment in line with their company's risk assessment and method statement.

Course Content

1. **Legislation and Codes of Practice**
2. **Cold hazards**
 - a. The minimum requirements for Personal Protective Equipment
 - b. Liquid nitrogen signage
 - c. Effects of Oxygen deficient and enriched atmospheres, with particular reference to confined spaces
 - d. Formation of Oxygen enriched atmospheres around transfer hoses and pipelines
3. **Asphyxiation hazards**
 - a. Principal gases of the atmosphere
 - b. Liquid to gas ratios
 - c. Rapid, and slow, asphyxiation
 - d. Specific gravity of gases
 - e. Atmospheric monitoring systems and usage
 - f. Emergency planning
4. **Pressure hazards**
 - a. Pressure relief equipment
 - b. Ice plug formation and safety considerations
5. **Vessels and dewars**
 - a. Vessel & dewar types
 - b. Manual handling
 - c. Pre use checks
 - d. Vessel components
6. **Decanting procedures**
 - a. Dynamic risk assessment considerations prior to decanting
 - b. Spillage emergency actions.

For further information or to book training
please contact: 01606 872864