




LSRA 10 – Toxic gases

Lab Standard Risk Assessment 10: Toxic gas use in labs

If referencing this standard to cover your lab work, the scope of the work must match this standard and the below controls must be communicated and followed by all operatives. All lab work must be in accordance with the chemical safety hand book.

Task Scope: Use of toxic gases and mixtures in labs for small scale experiments and testing

Persons at Risk	Operatives	Lab Technicians	Others in lab
Exposure Routes	Inhalation	Skin contact	Eye contact

Hazards			
	Toxic atmospheres	Long term health effects	Pressure releases

Control Measures

Minimisation of toxic inventory	Gas systems are tested for leaks including regulator fitting	Use LEV to extract hazardous atmospheres and exhausts	People are trained in the response to gas alarms – appropriate monitors are used
People are able to demonstrate the competence to work safely	Gas shut off devices are known	The safety data sheet is available outside the lab	Inert gases are used to leak test where possible

Personal Protective Equipment

		
Safety glasses	Disposable gloves	Face shield

Emergency Arrangements

Gas leak

Shut off the gas supply if safe to do so
 Leave the area, report to the EHCs and prevent others from entering the area
 Wait for the hazardous atmosphere to dissipate, do not enter until instructed

Gas exposure

Leave the area and move to fresh air
 Contact a first aider
 Arrange medical attention if you have symptoms – show the safety data sheet

Risk - Medium