



# Compressed Gas Cylinders Code of Practice for Handling

HAS-PRC-0030  
Issue 3.1  
Oct 2016  
APPROVED FOR USE

Uncontrolled  
Copy  
If Printed

Refer to  
SharePoint  
for Latest  
Version

<b>1. Purpose and Scope .....</b>	<b>3</b>
<b>2. Definitions.....</b>	<b>3</b>
<b>3. Responsibilities.....</b>	<b>3</b>
<b>4. Procedure .....</b>	<b>4</b>
Policy.....	4
Risk Assessments .....	4
Hazards.....	4
Transport.....	4
Storage .....	4
Connection.....	4
Faulty Cylinders .....	5
Training.....	5
<b>5. Referenced Documents.....</b>	<b>6</b>
<b>6. Records.....</b>	<b>6</b>
<b>7. Final Approvers.....</b>	<b>7</b>
<b>8. Document History .....</b>	<b>7</b>

## 1. Purpose and Scope

To give guidelines on handling gas cylinders

The procedure applies to: All persons who handle compressed gas cylinders

## 2. Definitions

Term	Definition
COSHH	Control of Substances Hazardous to Health

## 3. Responsibilities

For general responsibilities which apply, see Safety, Health and Environmental Policy Arrangements (HAS-POL-0001-ARR).

### Managers

Responsible for: Ensuring staff using gas cylinders are trained and competent

## 4. Procedure

Compressed gas cylinders are safe if these instructions are followed. When handled incorrectly or damaged accidentally they can be extremely dangerous – large quantities of toxic or flammable gas may be released. Uncontrolled discharge may result in a cylinder becoming jet-propelled by a pressure of up to 300 bar

---

### Policy

---

It is Diamond policy to ensure that all persons working with or handling compressed gas cylinder bottles are appropriately trained to use the gas bottles and associated equipment and that associated activities are suitably and sufficiently risk assessed.

---

### Risk Assessments

---

An up to date risk assessment must be available for all work involving compressed gas cylinders. COSHH assessments must be prepared for these materials.

---

### Hazards

---

The main hazards associated with compressed gas cylinders are –

- Manual handling
- High pressure release
- Cold burns
- Hazardous or flammable substances

---

### Transport

---

Valves must be closed and regulators removed before moving.

(Note – this does not apply for local movement within a laboratory or beamline).

Gas cylinders must always be transported by a dedicated bottle trolley or cage assembly. Lifts may be used, but you should not accompany the cylinder. Safety shoes should be worn.

---

### Storage

---

The cylinders should be stored upright and properly secured with a chain or clamp or mounted in a suitable stand. Ensure they are not vulnerable to impact by vehicles e.g. forklift trucks.

Empty cylinders should be returned to the storage area.

---

### Connection

---

Only connect a cylinder if you are absolutely sure of its contents.

Before fitting a regulator ensure the adjusting knob is fully released.

*HAS-PRC-0030 Compressed Gas Cylinders Code of Practice for Handling*

Fit the correct regulator (some are left hand – some are right hand) to the clean cylinder output.

Some cylinders require a Teflon/Nylon seal so this must be present before attaching the regulator to the cylinder.

A valve outlet may only be cleaned using a clean lint free cloth or tissue – ‘Sniffling’ (venting of a small quantity of gas to clear valve) is prohibited.

Never use grease or oil.

Using the correct spanner size tighten securely – do not overtighten.

Open the valve slowly – one turn is usually sufficient.

Leak checking as appropriate.

---

### Faulty Cylinders

---

Faulty/defective cylinders should be labelled ‘Do Not Use’ and reported to the Experimental Hall Coordinator (x8787).

---

### Training

---

All personnel handling cylinders should have appropriate training.

## 5. Referenced Documents

Document Title	Reference	Location
None		

## 6. Records

Record	Responsible Person / Group	Statutory	Retention Time
None			

## 7. Final Approvers

Position	Approval Type
Experimental Hall Manager	Management
Physical Science Coordinator	Management
Science Director – Physical	Management
Technical Director	Management
Head of SHE Group	SHE Management System

## 8. Document History

Issue	Date	Comment
1	28 03 2006	New document
2	01 02 2010	Minor Update
3	07 11 2013	Re-issue in new format
3.1	06 09 2017	Reformatted

End of document