



# Dealer Safety, Health & Environment Information Bulletin: No. DIB 01

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Department

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## THE STORAGE OF INDUSTRIAL COMPRESSED GAS CYLINDERS AT CALOR LPG STORAGE SITES

### Introduction

A number of Calor Gas sites store industrial gas cylinders as well as LPG. In most cases these are either Carbon Dioxide (pub gas) or industrial gases such as Acetylene, Argon, Compressed Air, Coogar, Helium, Hydrogen, Hytec, Nitrogen and Oxygen. There could also be other mixtures of these gases. Generally we act as agents for these cylinders that are supplied by Air Products or Messer.

A recent Health and Safety Executive inspection visit to a Calor Centre has highlighted the need to clarify the separation distances required and the associated storage requirements.

This SIB provides information on the requirements for the storage of industrial compressed gas cylinders in the same storage compounds as Liquefied Petroleum Gas cylinders.

### Background information

The LPGA CoP 7, Storage of LPG, Section 2.4.1.3 states that that not more than 50kg of

LPG in cylinders, with PRV's which vent horizontally, should be stored or kept within 3

metres of compressed gas cylinders including acetylene.

Under the Chemicals (Hazard Information and Packaging for Supply) Regulations and its more recent amendments, all compressed gases have a Class 2, Hazard Classification and are split into 3 sub-sections:-

2.1 Flammable

2.2 Non-flammable/non-toxic

2.3 Toxic

Generally it is Class 2.1 and 2.2 compressed gas cylinders that are stored on Calor sites.

Class 2.1 includes, Acetylene, Hydrogen, Hytec and LPG.

Class 2.2 includes, Argon, Compressed Air, Coogar, Helium, Nitrogen and Oxygen.

Further information on storage requirements is contained in HSE Publication HS(G) 71 and

the British Compressed Gases Association (BCGA) guidance GN2.

### Separation requirements

Class 2.1 cylinders must be separated from Class 2.2 cylinders by a minimum 3 metres separation distance in a storage compound, including empty cylinders of the same class.

In addition LPG cylinders must be kept 3 metres away from **ANY** compressed gas cylinder, whether full or empty.

A fire wall can be used to reduce these separation distances if necessary.

All locations storing compressed gas cylinders must comply with these requirements and **a site plan must be produced which clearly designates the separation distances between Class 2.1, Class 2.2 and LPG cylinders. Storage layouts must be suitably marked on the ground and full/empty signs displayed.**

Normally compressed gas cylinders are transported in special steel pallets/stillages which can act as a type of corral for storage on the ground. **These must only contain compressed gas cylinders of same class i.e. class 2.1 or 2.2.as detailed above.**

#### Manual Handling Regulations

Specific Risk assessments must be completed for the manual handling of industrial compressed gas cylinders at Calor sites. These cylinders are not as stable as LPG ones and consideration should be given to the fact that they can topple if not suitably restrained.

#### **Control of Substances Hazardous to Health (COSHH) Regulations**

All sites that store compressed gas cylinders must have a COSHH assessment completed for each different type of compressed gas cylinder that they stock.

#### **Carriage of Dangerous Goods by Road (CDGR) Regulations**

Calor sites which distribute compressed gas cylinders must have TREM cards and Consignors notes which cover all the different compressed gas cylinders that they transport.

#### **More Information**

**LPGA CoP 7 – Storage of Full and Empty LPG Cylinders and Cartridges.** A electronic copy is available under LPGA Codes of Practice on the Company's IntraNet page.

**HSG 71 Chemical Warehousing – The Storage of Packaged Dangerous Substances** which is available from HSE books priced at £9-50.

**BCGA Guidance Note GN2 – Guidance for the Storage of Transportable Gas Cylinders for Industrial use, Revision 2 : 1997** which is available from the British Compressed Gas Association, telephone No 01491 825533.

For further advice on the application of this requirement, please contact the Health and Safety Advisor in your area or the Safety, Health and Environment Department at Tachbrook Park.

**Approved by  
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