



1-12-2010

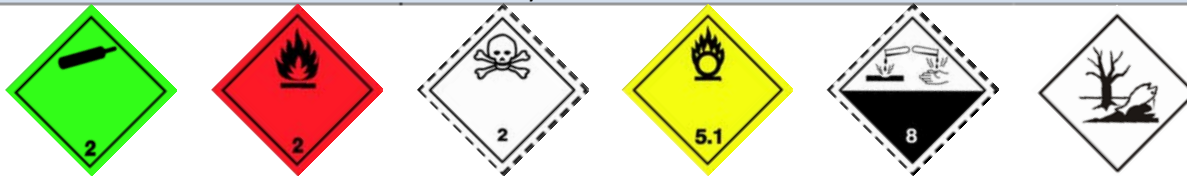
# New requirements for the labelling of gas cylinders



On 1st December 2010, the requirements of the EU Regulation on Classification, Labelling and Packaging (CLP Regulation 1272/2008) become mandatory for the labelling of pressure receptacles for pure gases. They will become mandatory for mixtures on 1st June 2015. Substances and mixtures may be labelled according to this Regulation before these dates. The CLP Regulation implements the Globally Harmonized System for the Classification and Labelling of Chemicals (GHS) of the United Nations (UN).

Labels required by the Transport Regulations (ADR, RID, ..) are unchanged with in addition the new "environmentally hazardous substance" mark

New CLP pictograms shall be added to transport labels to indicate hazards that are not covered by the Transport Regs.



N° 2.2

N° 2.1

N° 2.3

N° 5.1

N° 8

Environment

GHS 04

GHS 08

GHS 07

N° 2.2: Non-flammable, non-toxic gases.

N° 2.1: Flammable gases.

N° 2.3: Toxic gases.

N° 5.1: Oxidising substances, supplements label 2.2 or label 2.3 for the oxidising gases.

N° 8 : Corrosive substances, supplements label 2.3 for the toxic and corrosive gases.

**Environment:** Environmentally hazardous substance mark for gases classified for acute and/or chronic aquatic toxicity.

**GHS 04:** Gas under pressure, to be applied in the absence of transport label 2.2.

**GHS 08:** Respiratory Sensitization, Carcinogenicity, Mutagenicity, Reproductive Toxicity, Specific Target Organ Toxicity.

**GHS 07:** Acute Toxicity Category 4, Skin irritation, Eye Irritation, Skin Sensitization, Respiratory Tract Irritation.

## NEW INFORMATION ON PRESSURE RECEPTACLES FOR GASES

**SIGNAL WORDS** (Danger or Warning) to alert the reader to a potential hazard on the label.

**HAZARD STATEMENTS** that describe the nature of the hazards.

**PRECAUTIONARY STATEMENTS** that describe recommended measures to minimize or prevent adverse effects resulting from exposure to a hazardous product.

Information required by the transport regulations

**UN No and Proper Shipping Name**  
**Transport Labels and additional CLP Labels**  
 Other information

Precautionary statements for **PREVENTION, RESPONSE** to incidents, **STORAGE** of the products and **DISPOSAL** after use.

**SUPPLEMENTARY INFORMATION** from the supplier

### EXAMPLE FOR OXYGEN

**DANGER**

Contains gas under pressure; may explode if heated.

May cause or intensify fire; oxidizer.

**PREVENTION**

Store away from combustible materials.

Keep valves and fittings free from oil and grease.

**UN 1072 OXYGEN, COMPRESSED**



EC N° : 231-956-9

**RESPONSE**

In case of fire: Stop leak if safe to do so.

**STORAGE**

Store in a well-ventilated place.

**SUPPLEMENTARY INFORMATION**

Close valve after use.

### EXAMPLE FOR ACETYLENE

**DANGER**

Contains gas under pressure; may explode if heated.

Extremely flammable gas.

Explosive with or without contact with air.

**PREVENTION**

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

**RESPONSE**

Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

Eliminate all ignition sources if safe to do so.

**UN 1001 ACETYLENE, DISSOLVED**



EC N° : 200-816-9

**STORAGE**

Store in a well-ventilated place .

**SUPPLEMENTARY INFORMATION**

Close valve after use.

Dispose of cylinder via gas supplier only; cylinder contains a porous material which in some cases contains asbestos.

### EXAMPLE FOR NITROGEN

**WARNING**

Contains gas under pressure; may explode if heated.

Asphyxiant in high concentrations.

**UN 1066 NITROGEN, COMPRESSED**



EC N° : 231-783-9

**STORAGE**

Store in a well-ventilated place.

**SUPPLEMENTARY INFORMATION**

Close valve after use.

### EXAMPLE FOR HYDROGEN

#### DANGER

Contains gas under pressure; may explode if heated.

Extremely flammable gas.

#### PREVENTION

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

#### UN 1049 HYDROGEN, COMPRESSED



EC N° : 215-605-7

#### RESPONSE

Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

Eliminate all ignition sources if safe to do so.

#### STORAGE

Store in a well-ventilated place.

#### SUPPLEMENTARY INFORMATION

Close valve after use.

### EXAMPLE FOR ETHYLENE

#### DANGER

Contains gas under pressure; may explode if heated.

Extremely flammable gas.

May cause drowsiness or dizziness.

#### PREVENTION

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

Wear protective gloves/protective clothing/eye protection/face protection.

#### UN 1962 ETHYLENE



EC N° : 200-815-3

#### RESPONSE

Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

Eliminate all ignition sources if safe to do so.

IF ON SKIN: Wash with plenty of soap and water.

#### STORAGE

Store in a well-ventilated place.

#### SUPPLEMENTARY INFORMATION

Close valve after use.

### EXAMPLE FOR ETHYLENE OXIDE

#### DANGER

Contains gas under pressure; may explode if heated.

Extremely flammable gas.

Explosive with or without contact with air.

May cause cancer.

May cause genetic defects

Toxic if inhaled.

Causes serious eye irritation.

May cause respiratory irritation.

Causes skin irritation.

#### PREVENTION

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

Do not breathe gas/vapours.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves/protective clothing/eye protection/face protection.

#### UN 1040 ETHYLENE OXIDE



EC N° : 200-849-9

#### RESPONSE

Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

Eliminate all ignition sources if safe to do so.

IF ON SKIN: Wash with plenty of soap and water.

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get Immediate medical advice/attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get Immediate medical advice/attention.

IF exposed or concerned: Get medical advice/attention.

If skin irritation occurs: Get medical advice/attention.

#### STORAGE

Store in a well-ventilated place. Store locked up.

#### SUPPLEMENTARY INFORMATION

Close valve after use.

### EXAMPLE FOR HELIUM

#### WARNING

Contains gas under pressure; may explode if heated.  
Asphyxiant in high concentrations.

#### UN 1046 HELIUM, COMPRESSED



EC N° : 231-168-5

#### STORAGE

Store in a well-ventilated place.

#### SUPPLEMENTARY INFORMATION

Close valve after use.

### EXAMPLE FOR AMMONIA

#### DANGER

Contains gas under pressure; may explode if heated  
Flammable gas.  
Toxic if inhaled.  
Causes severe skin burns and eye damage.  
Very toxic to aquatic life.  
Corrosive to the respiratory tract.

#### PREVENTION

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Do not breathe gas/vapours.  
Avoid release to the environment.

#### UN 1005 AMMONIA, ANHYDROUS



EC N° : 231-635-3

#### RESPONSE

Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Get Immediate medical advice/attention.

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get Immediate medical advice/attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get Immediate medical advice/attention.

#### STORAGE

Store in a well-ventilated place. Store locked up.

#### SUPPLEMENTARY INFORMATION

Close valve after use.

**The intrinsic hazards of pure gases did not change with CLP, but the way to communicate them did.  
« SAFETY DATA SHEETS » CONTAINING CLP-INFORMATION WILL BE AVAILABLE AT YOUR GAS SUPPLIER.**

**SAFETY DATA SHEETS WILL BE SUBJECT TO CHANGE IN THE COMING YEARS DUE TO REACH REGISTRATION PROGRESS.**