

Annule et remplace :
Page :
Edition : 4
Date : 14/04/16

PROPANE

Saint Genis Laval
Edition : 5
Date : 19/05/17

Specific risk: EXTREMELY FLAMMABLE

1. Product identification

Name Commercial Propane
Intended use Fuel
Nature LPG - liquefied petroleum gases
Presentation/Packaging Containers conform to existing regulation.

Container type	Gas contained			
	Propane			
Non rechargeable cylinder				
Cylinder 453g propane Coleman	X			

Supplier : APPLICATION DES GAZ,
Address : 219 Route de Brignais, 69563 ST GENIS LAVAL FRANCE
Phone + 33 (0) 4 78 86 88 94
Fax: + 33 (0) 4 78 86 88 84
E-mail info@coleman.eu

2. Risk factors:

Propane is manufactured, stored, transported and distributed under pressure in liquefied form. In normal conditions, they remain in sealed systems up until their final destruction by combustion (use), and are therefore never handled directly. The continual confinement of these gases is of utmost importance. Nevertheless, certain special precautions are recommended to prevent or deal with their accidental release into the atmosphere, i.e. a leak.

Physical and chemical properties **extremely flammable**
In the event of a leak, as gas is heavier than air, it has a tendency, in the absence of ventilation, to accumulate at the lowest possible levels. The intense heating of a container can cause it to rupture, allowing the product to escape; the ignition of vapour can give rise to deflagration or explosion.

Health hazards **in gaseous state**, breathing in highly concentrated vapours can cause drowsiness, intoxication, narcosis and in extreme cases, coma through the rarefaction of oxygen.

In liquid state, it can cause cold burns. in particular in the event of projection

Annule et remplace :
Page :
Edition : 4
Date : 14/04/16

PROPANE

Saint Genis Laval
Edition : 5
Date : 19/05/17

Labelling SGH regulation (EC) 1272/2008 (CLP) :**Signal Word**

Danger

Hazard Statement:

H220-Extremely flammable gas

H280-Contains gas under pressure; may explode if heated

Precautionary Statement:

P102- Keep out of reach of children.

P210- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking..

P377- Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

P381- Eliminate all ignition sources if safe to do so.

P403- Store in a well-ventilated place.

3. Composition/Information on components

Usual chemical name/generic name:

Commercial propane:

Mix of hydrocarbons made up in the proportion of 90% approximately of propane, propene and for the rest of ethane, ethylene, propane and butanes. The product must be treated to emit a characteristic smell. Depending on the season, it can contain methanol in a usual proportion in the order of 1 to 1000.

CAS number:

74-98-6

EC number:

200-827-6

The product is exempted from pre registration and registration (Annex V (2)(7)(b).of Regulation 1907/2006

Constituents contributing to the risks: Propane is very flammable and form explosive mixe with air.

4. First aid

In the event of serious accidents, call a doctor or request emergency medical assistance.

Inhalation:

Symptoms are mainly: headache, dizziness, narcotic effect and loss of consciousness in case of asphyxiation:

The subject should be taken outdoors and kept in a resting position.
If suffering from respiratory difficulties or loss of consciousness, call a doctor immediately and administer respiratory assistance.

Skin

Rinse thoroughly with cold water.

Remove contaminated clothing and eventually: rings, watch, bracelet; leave in place if these objects and clothing stick to the skin.

Try to heat slowly the parts reached.

For the significant cases call a doctor immediately

Annule et remplace :
Page :
Edition : 4
Date : 14/04/16

Saint Genis Laval
Edition : 5
Date : 19/05/17

PROPANE

Eyes Immediately flush eyes thoroughly with water for at least 10 min keep the eye protected and consult a specialist.

Inflammation of clothing: Hose down with water.

Protecting rescuers To enter an area where propane is leaking: depending on the exposure risks, wear appropriate insulating breathing apparatus or helmet with face mask and neck protection, gloves, overalls and boots (with trousers outside). They should be made of infusible, fire-resistant materials. This type of intervention must be made **EXCLUSIVELY** by staff trained especially for this purpose. Equip all operators with a lifeline

5. Fire-fighting measures

Flash point Lower to -50°C

Extinguishing means: Recommended: powder, CO2, spraying with water in certain cases.
Advised: hosing with a concentrated stream of water
Ineffective: foam

Specific dangers incomplete combustion creates toxic CO the inhalation of which is particularly hazardous.

Extinction. It is dangerous to put out a flame if the leak cannot be completely stopped.

Protection of stocks: As soon as a firebreaks out, evacuate all exposed flammable materials and LPG containers. Thoroughly cool by spraying with water all containers that cannot be evacuated. Do not hose down with a concentrated stream of water.

Container fire: If a container that is connected to an appliance catches fire, do not throw or turn it upside-down, as this can only exacerbate the problem (spilling of liquid gas or container rupture).
Never tip a container on fire.
Keep people away.

Try to close the valve, protecting your hands and forearms with a wet cloth. If possible, take the container outside without lying it down.

Protecting of rescuers Protect personnel with fire protective clothing, copious quantities of water spray or fireproof wall.
Do not enter enclosed or confined space without proper protective equipment including self-contained breathing apparatus

6. Measures to be taken in case of accidental dispersion

Gas or liquid leak Avoid contact of the liquefied gas with the skin
Do not stay in the vapour cloud (propane air mixtures). But Place you behind the source.

In case of leaks in a closed room Thoroughly air out the room
Keep away from all sources of ignition; avoid all electrical switching.
Block off allow-level openings in close proximity (vent holes, drain holes)
Keep people away

Annule et remplace :
Page :
Edition : 4
Date : 14/04/16

Saint Genis Laval
Edition : 5
Date : 19/05/17

PROPANE

Call on specialised emergency assistance

Container

If the leak cannot be stopped by closing the valve, take the container outdoor, avoiding any impact and dispose it in a safe area without turning it upside-down.

7. Handling and storage

Handling

Follow the instructions enclosed with the appliance and those indicated on the containers.
Always use in a well-ventilated area to allow for the evacuation of fumes and products of combustion (CO, CO₂)
Do not smoke.
Use exclusively with suitable appliances (indication on containers).
Always use the containers in the upright position.
Close container after each use.
Odourisation allows a 0.5% gas content in the air to be detected
If the smell of gas is detected, search for the leak with soapy water before using the appliance.
Never look for a leak with a naked flame.
Never refill an empty container.
Do not heat containers.

Storage

According to quantities product nature store, observe the regulations in force. In large quantities, the storage can depend of the specific regulations.
Store in well ventilated are, away from all sources of heat and ignition.
Do not expose containers to a temperature exceeding 50°C/120°F.
Do not store below floor level (basement or cellar, for example).
Store away from low-level points where vapours can accumulate
Do not store in a vehicle (heating by the sun).
Avoid contact with strong oxidising agents and keep away from combustible materials.

Use exclusively containers or cartridges intended to propane and comply with regulation.
Use only electrical equipment adapted (explosion proof) in the danger zones.

8. Control of exposure personal protection

All works on installations of propane shall only be made by specially trained people and according adapted instructions.

Personal Protective Equipment

Head protection: Use a helmet like for the operations of loading/unloading or storage.
Eyes protection: Goggles or safety glasses, to protect eyes from exposure to liquid.
Hands protection: Protective gloves against cold
Skin protection: Clothing fireproofed and avoiding electrostatic charges

Annule et remplace :
Page :
Edition : 4
Date : 14/04/16

PROPANE

Saint Genis Laval
Edition : 5
Date : 19/05/17

9. Physical and chemical properties

Physical state	Liquid in the container, Gaseous at atmospheric pressure	
Colour	In gaseous state: Colourless In liquid state: Colourless	
Odour:	Characteristic	
Auto-ignition temperature	higher than 400°C	
Flammability limits lower:	Approx: 2.15%	Upper: approx. 9.6%
Flash point	Lower than -50°C	

	Propane
Boiling To under 1 atm. approx.	-42°C
Relative vapour pressure (bar)max. at 15°C approx	7.5
Relative vapour pressure (bar)max. at 50°C approx	11.5<P<19.3
Density (liquid at 50°C) kg/l min.	0.443
Density/air (T° = 15°C, P =1 atm) approx.	1.87

Solubility	Slightly soluble in water
Butane evaporation	1L of liquide propane got up to atmospheric pressure generates a volume of vapor about 270 L.

10. Stability-reactivity

Stability	Product stable in normal conditions of use
Decomposition product	No known decomposition products
Dangerous reaction	Explodes or catches fire when exposed to heat or a source of ignition. Combustion products include nitrogen, carbonic gas and water vapour. Carbon monoxide (toxic) is released during bad combustion.

11. Toxicology

Severe toxicity	Inapplicable. LPGs are kept in closed containers until their destruction by combustion. The greatest danger is the ignition of vapours in the air following an accidental leak. Breathing in highly concentrated vapours could result in drowsiness, intoxication or narcosis and, in extreme cases, coma. In the event of incomplete combustion, the ensuing release of carbon monoxide can cause dizziness, headaches, loss of muscular mobility and coma.
-----------------	--

12. Ecological information

As they evaporate instantly and are only slightly soluble in water, LPGs present no known environmental hazards. Gas accidentally released into the atmosphere is rapidly diluted and undergoes photochemical decomposition.

Annule et remplace :
Page :
Edition : 4
Date : 14/04/16

PROPANE

Saint Genis Laval
Edition : 5
Date : 19/05/17

13. Elimination of waste:

As containers of LPGs always contain flammable vapours, never pierce or burn a container, even when empty. Emptying a container from liquefied gas shall only be made by specially trained people and according adapted instructions.

Observe the regulations in force on waste for the disposal of empty cartridges.

Packaging materials non refillable cylinders : steel

14. Product transport

For transport of private use, respect the instructions written on the container, like do not store containers in a vehicle heat by the sun.

All containers meet the requirements of the transport regulations.

For transporting large quantities, follow the applicable safety regulations (road, sea, air).

ROAD: United Nations regulations (UN) - **ADR** - 2015

Product	N° ONU	Designation	Class	Danger code	Hazard Class
Propane Containers	1978	Propane,	Class 2, 2°F	23	2.1

RAIL: Convention concerning International Carriage by Rail (COTIF) - **RID**

Product	N° ONU	Designation	Class	Danger code	Hazard Class
Propane Containers	1978	Propane,	Class 2 , 2°F	23	2.1

SEA: International Maritime Dangerous Goods (OMI) **IMDG**

Product	N° ONU	Designation	Class	Danger label	Safety sheet N°	N° table GSMU
Propane Containers	1978	Propane,	Class 2.1	2.1	3	310

Air: International Air Transport Association - **IATA**

Product	N° ONU	Designation	Class	Danger label	Passenger plane	Cargo plane
Propane Containers	1978	Propane,	Class 2.1	2.1	Limited	Limited

Annule et remplace :
Page :
Edition : 4
Date : 14/04/16

PROPANE

Saint Genis Laval
Edition : 5
Date : 19/05/17

15. Regulatory information:**Labelling****Labelling SGH regulation (EC) 1272/2008 (CLP) :****Signal Word**

Danger

Hazard Statement:

H220-Extremely flammable gas

H280-Contains gas under pressure; may explode if heated

Precautionary Statement:

P102- Keep out of reach of children.

P210- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking..

P377- Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

P381- Eliminate all ignition sources if safe to do so.

P403- Store in a well-ventilated place.

16. Additional information:

Use only for the applications and with the appliances indicated on the containers

Before using this product for an experience or a new application, read carefully the instructions indicated on the container or the appliance, to know the compatibility and the safety rules.

The regulation data and advice given are there to help the consumer to follow his regulatory obligations and describe any precautions, which should be taken. But this prescription cannot be considered like exhaustive.

The user has to ensure that national, international or local regulations are observed.

Safety data sheet established in application of Authorisation and Restriction of Chemicals (REACH)

European Regulation EC N° 1907/2006. All information contained in this sheet is based on our knowledge. This data sheet supplements the instructions include with the product, but don't replace them.

Whilst proper care has been taken in the preparation of this document, no liability for injury or damage resulting its use can be accepted.

19/05/17-V5 Suppression Directive 67/548/CEE