



# Material Safety Data Sheet Propane

**AXCEL GASES**

Creation Date: 15.02.2008

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## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

**Product name:** Propane  
**Chemical formula:** C<sub>3</sub>H<sub>8</sub>  
**Known uses:** Not known  
**Company:** Axcel Gases  
**Head Office:**  
1K/49, NIT, Faridabad, 121001, India  
**Email:** [info@axcelgases.com](mailto:info@axcelgases.com)  
**Works:**  
80 KM Delhi-Jaipur Highway, Distt. Rewari, 123106  
Haryana, India  
**Email:** [info@axcelgases.com](mailto:info@axcelgases.com)

## 2. HAZARDS IDENTIFICATION

### Classification of the substance or mixture

#### Classification acc. to Regulation (EC) No 1272/2008/EC (CLP/GHS)

Press. Gas (Liquefied gas) - Contains gas under pressure; may explode if heated.  
Flam. Gas 1 – Extremely flammable gas

#### Classification acc. to Directive 67/548/EEC & 1999/45/EC

F+; R12  
Extremely Flammable.

#### Risk advice to man and the environment

Liquefied gas.

#### Label Elements

##### - Labelling Pictograms



##### -Signal word

Danger

##### - Hazard Statements

H280 Contains gas under pressure; may explode if heated.

H220 Extremely Flammable gas.

##### - Precautionary Statements

#### Precautionary Statement Prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

#### Precautionary Statement Response

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

P381 Eliminate all ignition sources if safe to do so.

#### Precautionary Statement Storage

P403 Store in a well-ventilated place.

#### Precautionary Statement Disposal

None.



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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance/Preparation:** Substance.

**Components/Impurities**

Propane

**CAS No:** 74-98-6

**Index-Nr.:** 601-003-00-5

**EC No (from EINECS) :** 200-827-9

**REACH Registration number:** Not available.

Contains no other components or impurities which will influence the classification of the product.

### 4. FIRST AID MEASURES

#### Inhalation:

In high concentrations may cause asphyxiation. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation. In low concentrations may cause narcotic effects. Symptoms may include dizziness, headache, nausea and loss of coordination. Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.

#### Ingestion:

Ingestion is not considered a potential route of exposure

### 5. FIRE FIGHTING MEASURES

**Specific hazards :** Exposure to fire may cause containers to rupture/explode.

**Hazardous combustion products :** Incomplete combustion may form carbon monoxide.

**Suitable extinguishing media :** All known extinguishants can be used.

**Specific methods :** If possible, stop flow of product. Move container away or cool with water from a protected position. Do not extinguish a leaking gas flame unless absolutely necessary. Spontaneous/explosive re-ignition may occur.

**Special protective equipment for fire fighters :** In confined space use self-contained breathing apparatus.

### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe. Ensure adequate air ventilation. Eliminate ignition sources.

**Environmental precautions:** Try to stop release. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.

**Clean up methods :** Ventilate area.

### 7. HANDLING AND STORAGE

#### Handling

Ensure equipment is adequately earthed. Suck back of water into the container must be prevented. Purge air from system before introducing gas. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt. Keep away from ignition sources (including static discharges). Refer to supplier's handling instructions.

#### Storage

Secure cylinders to prevent them falling. Keep container below 50°C in a well ventilated place.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Exposure limit value

Value Type	Value	Note
TLV (ACGIH)	2.500 ppm	ACGIH 1995-1996

**Personal protection:** Protect eyes, face and skin from liquid splashes.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### General information

**Appearance/Colour:** Colourless gas.

**Odour:** Poor warning properties at low concentrations. Sweetish

**Important information on environment, health and safety Molecular weight:** 44 g/mol

**Melting point:** -188 °C

**Boiling point:** -42,1 °C

**Critical temperature:** -118 °C

**Autoignition temperature:** 470 °C

**Flammability range:** 2,2 %(V) - 9,5 %(V)

**Relative density, gas:** 1,5

**Solubility in water:** 75 mg/l

**Maximum filling pressure (bar):** 8,5 bar

#### Other data

Gas/vapour heavier than air. May accumulate in confined spaces, particularly at or below ground level.



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### 10. STABILITY AND REACTIVITY

**Stability and reactivity :** Can form explosive mixture with air. May react violently with oxidants.

### 11. TOXICOLOGICAL INFORMATION

**General:** No known toxicological effects from this product.

### 12. ECOLOGICAL INFORMATION

**General:** No known ecological damage caused by this product.

### 13. DISPOSAL CONSIDERATIONS

**General :** Do not discharge into areas where there is a risk of forming an explosive mixture with air. Waste gas should be flared through a suitable burner with flash back arrestor. Do not discharge into any place where its accumulation could be dangerous. Contact supplier if guidance is required

**EWC Nr. 16 05 04\***

### 14. TRANSPORT INFORMATION

#### ADR/RID

Class: 2

Classification Code: 2F

#### UN number and proper shipping name

UN 1965 Hydrocarbon Gas Mixture, liquefied, n.o.s. (Propane)

UN 1965 Hydrocarbon Gas Mixture, liquefied, n.o.s. (Propane)

Labels: 2.1

Hazard number: 23

Packing Instruction: P200

#### IMDG

Class : 2.1

#### UN number and proper shipping name

UN 1965 Hydrocarbon Gas Mixture, liquefied, n.o.s. (Propane)

Labels : 2.1

Packing Instruction : P200

EmS: FD, SU

#### IATA

Class : 2.1

#### UN number and proper shipping name

UN 1965 Hydrocarbon Gas Mixture, liquefied, n.o.s. (Propane)

Labels : 2.2, 5.1

Packing Instruction: P200

#### Other transport information

Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers ensure that they are firmly secured. Ensure that the cylinder valve is closed and not leaking. Ensure that the valve outlet cap nut or plug (where provided) is correctly fitted. Ensure that the valve protection device (where provided) is correctly fitted. Ensure adequate ventilation. Ensure compliance with applicable regulations.

### 15. REGULATORY INFORMATION

#### Further national regulations :-

- Publication series of Dangerous Goods: PGS 15 - Storage of packed dangerous goods (published by the Ministry of Housing, Spatial Planning and Environment (VROM)).
- Working conditions Catalogue AI-18 (Laboratory) and AI-31 (Dangerous Substances) (published by SDU Publishing business).
- Ministry for Social Affairs and Employment: Regulation 4.6-1 - Prevention of accidents on the account of storage, use and transport of pressure receptacles.

This substance or preparation above certain volume may have to be included in a SEVESO II submission or any other applicable national regulation.



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**16. OTHER INFORMATION**

Ensure all national/local regulations are observed. Ensure operators understand the flammability hazard. The hazard of asphyxiation is often overlooked and must be stressed during operator training. Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out.

**Advice**

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