THE LINDE GROUP



Safety data sheet Propane.

Version: 3.0 NL/E SDS No.: 8368 Creation date: 27.01.2005 Revision date: 04.01.2011

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IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

Product name

Propane.

Trade name

Propaan 2.5 Chemical Propaan 3.5 Scientific Propaan Borg

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

CAS No: 74-98-6 Index-Nr. 601-003-00-5 Chemical formula C3H8 **REACH Registration number:**

Not available. Known uses Not known.

Company identification

Linde Gas Benelux B.V., Havenstraat 1, NL 3115 HC, Schiedam

E-Mail Address sheg.lg.nl@linde.com

Emergency phone numbers (24h): +31 (0) 10 2461616 Poison center:

+31 (0) 30 2748888 - National Poison Information Centre, Utrecht.

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

Keep away from heat/sparks/open P210

flames/hot surfaces. - No smoking.

Precautionary Statement Reaction

Leaking gas fire: Do not extinguish,

unless leakcan be stopped safely. P381 Eliminate all ignition sources if safe to do

Precautionary Statement Storage

Store in a well-ventilated place.

Precautionary Statement Disposal

None.

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.

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.

Indestion

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 reignition 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

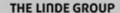
Try to stop release. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.

Clean up methods

Ventilate area.

7 HANDLING AND STORAGE

Handling





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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) ACGIH 1995 - 1996 2.500 ppm

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 ℃ Boiling point: -42,1 ℃ Critical temperature: 97 ℃ Autoignition temperature: 470 °C

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

Relative density, gas: 1,5 Solubility mg/l 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.

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

2F Classification Code Class

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

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

UN number and proper shipping name

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

2.1 P200 Packing Instruction 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 Al-18 (Laboratory) and Al-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.

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

Whilst proper care has been taken in the preparation of this document, no liability for injury or damage resulting from its use can be accepted. Details given in this document are believed to be correct at the time of going to press.

Further information

Linde safety advice

Oxygen deficiency No. 3



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Safe handling of gas cylinders and cylinder bundles Handling of acetylene Transport of gas receptacles in vehicles No. 7

No. 10 No. 11

End of document