

Safety Data Sheet

≤12% Ethane & ≤5% Propane in Nitrogen

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878
Reference number: SDS 01525
Issue date: 2/15/2024 Version: 1.0

Danger



SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

SDS no : SDS 01525

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses : Industrial and professional use for chemical analysis, calibration, (routine) quality control, laboratory use, under controlled conditions.

Uses advised against : Consumer use.

Uses other than those listed above are not supported, contact your supplier for more information on other uses.

1.3. Details of the supplier of the safety data sheet

Air Liquide UK Ltd.
Station Road
Coleshill
B46 1JY Birmingham
United Kingdom
safety.aluk@airliquide.com

1.4. Emergency telephone number

Emergency telephone number : 01675 462695 (Available 24/7)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

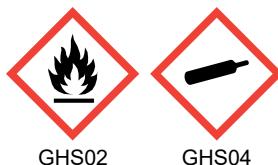
Classification according to Regulation (EC) No. 1272/2008 [CLP]

Physical hazards	Flammable gases, Category 1B	H221
	Gases under pressure : Compressed gas	H280

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

GHS04

Signal word (CLP) : Danger

Hazard statements (CLP) : H221 - Flammable gas.
H280 - Contains gas under pressure; may explode if heated.

Precautionary statements (CLP)

- Prevention : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Response : P377 - Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
P381 - In case of leakage, eliminate all ignition sources.
- Storage : P403 - Store in a well-ventilated place.

2.3. Other hazards

Asphyxiant in high concentrations.
These high concentrations are within the flammability range.
Not classified as PBT or vPvB.
The substance/mixture has no endocrine disrupting properties.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP] ATE, EUH-statements, M-Factors
Nitrogen	CAS-No.: 7727-37-9 EC-No.: 231-783-9 EC Index-No.: --- REACH-no: *1	83	Press. Gas (Comp.), H280
Ethane	CAS-No.: 74-84-0 EC-No.: 200-814-8 EC Index-No.: 601-002-00-X REACH-no: 01-2119486765-21	12	Flam. Gas 1A, H220 Press. Gas (Liq.), H280
Propane	CAS-No.: 74-98-6 EC-No.: 200-827-9 EC Index-No.: 601-003-00-5 REACH-no: 01-2119486944-21	5	Flam. Gas 1A, H220 Press. Gas (Liq.), H280

Full text of H- and EUH-statements: see section 16

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

*1: Listed in Annex IV / V REACH, exempted from registration.

*3: Registration not required: Substance manufactured or imported < 1t/y.

SECTION 4: First aid measures

4.1. Description of first aid measures

- Inhalation : Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Perform cardiopulmonary resuscitation if breathing stopped.
- Skin contact : Adverse effects not expected from this product.
- Eye contact : Adverse effects not expected from this product.
- Ingestion : Ingestion is not considered a potential route of exposure.

4.2. Most important symptoms and effects, both acute and delayed

In high concentrations may cause asphyxiation. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation.
See section 11.

4.3. Indication of any immediate medical attention and special treatment needed

None.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Shutting off the source of the gas is the preferred method of control.
- Unsuitable extinguishing media : Do not use water jet to extinguish.

5.2. Special hazards arising from the substance or mixture

- Specific hazards : Exposure to fire may cause containers to rupture/explode.
- Hazardous combustion products : Carbon monoxide.

5.3. Advice for firefighters

- Specific methods :
 - Use fire control measures appropriate for the surrounding fire. Exposure to fire and heat radiation may cause gas receptacles to rupture. Cool endangered receptacles with water spray jet from a protected position. Prevent water used in emergency cases from entering sewers and drainage systems.
 - If possible, stop flow of product.
 - Use water spray or fog to knock down fire fumes if possible.
 - Do not extinguish a leaking gas flame unless absolutely necessary. Spontaneous/explosive re-ignition may occur. Extinguish any other fire.
 - Move containers away from the fire area if this can be done without risk.
- Special protective equipment for fire fighters :
 - In confined space use self-contained breathing apparatus.
 - Standard protective clothing and equipment (Self Contained Breathing Apparatus) for fire fighters.
 - Standard EN 137 - Self-contained open-circuit compressed air breathing apparatus with full face mask.
 - Standard EN 469 - Protective clothing for firefighters. Standard - EN 659: Protective gloves for firefighters.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel :
 - Act in accordance with local emergency plan.
 - Try to stop release.
 - Evacuate area.
 - Eliminate ignition sources.
 - Ensure adequate air ventilation.
 - Stay upwind.
 - See section 8 of the SDS for more information on personal protective equipment.
- For emergency responders :
 - Monitor concentration of released product.
 - Consider the risk of potentially explosive atmospheres.
 - Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe.
 - See section 5.3 of the SDS for more information.

6.2. Environmental precautions

- Try to stop release.

6.3. Methods and material for containment and cleaning up

- Ventilate area.

6.4. Reference to other sections

- See also sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Safe use of the product

- : Do not breathe gas.
- Avoid release of product into atmosphere.
- The product must be handled in accordance with good industrial hygiene and safety procedures.
- Only experienced and properly instructed persons should handle gases under pressure.
- Consider pressure relief device(s) in gas installations.
- Ensure the complete gas system was (or is regularly) checked for leaks before use.
- Do not smoke while handling product.
- Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt.
- Avoid suck back of water, acid and alkalis.
- Assess the risk of potentially explosive atmospheres and the need for explosion-proof equipment.
- Purge air from system before introducing gas.
- Take precautionary measures against static discharge.
- Keep away from ignition sources (including static discharges).
- Consider the use of only non-sparking tools.
- Ensure equipment is adequately earthed.

Safe handling of the gas receptacle

- : Refer to supplier's container handling instructions.
- Do not allow backfeed into the container.
- Protect containers from physical damage; do not drag, roll, slide or drop.
- When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport cylinders.
- Leave valve protection caps in place until the container has been secured against either a wall or bench or placed in a container stand and is ready for use.
- If user experiences any difficulty operating valve discontinue use and contact supplier.
- Never attempt to repair or modify container valves or safety relief devices.
- Damaged valves should be reported immediately to the supplier.
- Keep container valve outlets clean and free from contaminants particularly oil and water.
- Replace valve outlet caps or plugs and container caps where supplied as soon as container is disconnected from equipment.
- Close container valve after each use and when empty, even if still connected to equipment.
- Never attempt to transfer gases from one cylinder/container to another.
- Never use direct flame or electrical heating devices to raise the pressure of a container.
- Do not remove or deface labels provided by the supplier for the identification of the content of the container.
- Suck back of water into the container must be prevented.
- Open valve slowly to avoid pressure shock.

7.2. Conditions for safe storage, including any incompatibilities

- Observe all regulations and local requirements regarding storage of containers.
- Containers should not be stored in conditions likely to encourage corrosion.
- Container valve guards or caps should be in place.
- Containers should be stored in the vertical position and properly secured to prevent them from falling over.
- Stored containers should be periodically checked for general condition and leakage.
- Keep container below 50°C in a well ventilated place.
- Store containers in location free from fire risk and away from sources of heat and ignition.
- Keep away from combustible materials.
- Segregate from oxidant gases and other oxidants in store.
- All electrical equipment in the storage areas should be compatible with the risk of a potentially explosive atmosphere.

7.3. Specific end use(s)

None.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ethane (74-84-0)	
Belgium - Occupational Exposure Limits	
Local name	Hydrocarbures aliphatiques sous forme gazeuse: (Alcanes C1-C3) # Alifatische koolwaterstoffen in gas-vorm: Alkanen (C1-C3)
OEL TWA	1000 ppm
Regulatory reference	Koninklijk besluit/Arrêté royal 11/05/2021
Finland - Occupational Exposure Limits	
Local name	Etaani
HTP (OEL TWA)	1000 ppm
Remark	Happea syrjäyttämällä tukahduttavat kaasut.
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveysministeriö)
Ireland - Occupational Exposure Limits	
Local name	Aliphatic hydrocarbon gases Alkanes (C1-C3): Ethane
Remark	Asphx. (Gaseous chemical substances which may not produce significant physiological effects in the exposed employee, but when present in high concentrations will act as simple asphyxiants)
Regulatory reference	Chemical Agents Code of Practice 2021
Spain - Occupational Exposure Limits	
Local name	Etano
VLA-ED (OEL TWA)	1000 ppm Hidrocarburos alifáticos alcanos (C1 – C4) y sus mezclas, gases (Butano; Etano; Metano; Propano)
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2023. INSHT
Switzerland - Occupational Exposure Limits	
Local name	Ethane / Ethan
MAK (OEL TWA)	12500 mg/m³
	10000 ppm
Critical toxicity	Formel / Formal
Regulatory reference	www.suva.ch, 01.01.2023
USA - ACGIH - Occupational Exposure Limits	
Local name	Ethane
Remark (ACGIH)	TLV® Basis: Simple Asphyxiant
Regulatory reference	ACGIH 2023

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Propane (74-98-6)	
Austria - Occupational Exposure Limits	
Local name	Propan (R 290)
MAK (mg/m³)	1800 mg/m³
MAK (OEL TWA)	1000 ppm
MAK (OEL STEL)	3600 mg/m³ (3x 60(Mow) min)
	2000 ppm (3x 60(Mow) min)
Regulatory reference	BGBI. II Nr. 156/2021
Belgium - Occupational Exposure Limits	
Local name	Hydrocarbures aliphatiques sous forme gazeuse: (Alcanes C1-C3) # Alifatische koolwaterstoffen in gas-vorm: Alkanen (C1-C3)
OEL TWA	1000 ppm
Regulatory reference	Koninklijk besluit/Arrêté royal 11/05/2021
Bulgaria - Occupational Exposure Limits	
Local name	Пропан
OEL TWA	1800 mg/m³
Regulatory reference	Наредба № 13 от 30.12.2003 г. за защита на работещите от рискове, свързани с експозиция на химични агенти при работа (изм. и доп. ДВ. бр. 47 от 2021 г., в сила от 04.06.2021 г.)
Denmark - Occupational Exposure Limits	
Local name	Propan (Flaskegas)
OEL TWA	1800 mg/m³
	1000 ppm
Regulatory reference	BEK nr 1054 af 28/06/2022
Estonia - Occupational Exposure Limits	
Local name	Propaan
OEL TWA	1800 mg/m³
	1000 ppm
Regulatory reference	Vabariigi Valitsuse 20. märtsi 2001. a määruse nr 105 (RT I, 15.05.2021, 1)
Finland - Occupational Exposure Limits	
Local name	Propaani
HTP (OEL TWA)	1500 mg/m³
	800 ppm
HTP (OEL STEL)	2000 mg/m³
	1100 ppm
Remark	Happea syrjäyttämällä tukahduttavat kaasut.
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveysministeriö)

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Germany - Occupational Exposure Limits (TRGS 900)	
Local name	Propan
AGW (OEL TWA)	1800 mg/m ³
	1000 ppm
Peak exposure limitation factor	4(II)
Remark	DFG - Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission)
Regulatory reference	TRGS900
Greece - Occupational Exposure Limits	
Local name	Προπάνιο
OEL TWA	1800 mg/m ³
	1000 ppm
Regulatory reference	Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους
Ireland - Occupational Exposure Limits	
Local name	Aliphatic hydrocarbon gases Alkanes (C1-C3): Propane
Remark	Asphx. (Gaseous chemical substances which may not produce significant physiological effects in the exposed employee, but when present in high concentrations will act as simple asphyxiants)
Regulatory reference	Chemical Agents Code of Practice 2021
Latvia - Occupational Exposure Limits	
Local name	Propāns
OEL TWA	1800 mg/m ³
	1000 ppm
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325 (Grozījumi Ministru kabineta 2015. gada 7. aprīlī noteikumiem Nr. 163)
Poland - Occupational Exposure Limits	
Local name	Propan
NDS (OEL TWA)	1800 mg/m ³
Regulatory reference	Dz. U. 2018 poz. 1286
Romania - Occupational Exposure Limits	
Local name	Propan
OEL TWA	1400 mg/m ³
	778 ppm
OEL STEL	1800 mg/m ³
	1000 ppm
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 53/2021)
Slovenia - Occupational Exposure Limits	
Local name	propan

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OEL TWA	1800 mg/m ³
	1000 ppm
OEL STEL	7200 mg/m ³
	4000 ppm
Regulatory reference	Uradni list RS, št. 72/2021 z dne 11.5.2021
Spain - Occupational Exposure Limits	
Local name	Propano
VLA-ED (OEL TWA)	1000 ppm Hidrocarburos alifáticos alcanos (C1 – C4) y sus mezclas, gases (Butano; Etano; Metano; Propano)
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2023. INSHT
Iceland - Occupational Exposure Limits	
Local name	Própan (flöskugas)
OEL TWA	1800 mg/m ³
	1000 ppm
Regulatory reference	Reglugerð um mengunarmörk og aðgerðir til að draga úr mengun á vinnustöðum (Nr. 390/2009)
Norway - Occupational Exposure Limits	
Local name	Propan
Grenseverdi (OEL TWA)	900 mg/m ³
	500 ppm
Regulatory reference	FOR-2021-06-28-2248
North Macedonia - Occupational Exposure Limits	
Local name	Пропан
OEL TWA	1800 mg/m ³
	1000 ppm
KTV	4
Short time value [mg/m ³]	7200 mg/m ³
Short time value [ppm]	4000 ppm
Remark	(KTV) краткотрајна вредност (КТВ) значи концентрација на опасни хемиски супстанции во воздухот на работното место внатре во зона на дишење, на која работникот без опасност по здравјето може да е изложен на покус време. Изложеноста на краткотрајни вредности може да трае највеќе 15 минути и не смее да се повтори повеќе од четирипати во работната смена, при што меѓу две изложености на оваа концентрација мора да измине најмалку 60 минути. Краткотрајната вредност е изразена во mg/m ³ или во ml/m ³ (ppm) а е дадена како многукратни дозволени пречекорувања на граничната вредност
Regulatory reference	Правилник за минималните барања за безбедност и здравје при работа на вработени од ризици поврзани со изложување на хемиски супстанции („Службен весник на Република Македонија” бр.46/10)

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Reference number: SDS 01525

Switzerland - Occupational Exposure Limits	
Local name	Propane / Propan
MAK (OEL TWA)	1800 mg/m³
	1000 ppm
KZGW (OEL STEL)	7200 mg/m³
	4000 ppm
Critical toxicity	Formel / Formal
Remark	NIOSH
Regulatory reference	www.suva.ch, 01.01.2023
USA - ACGIH - Occupational Exposure Limits	
Local name	Propane
Remark (ACGIH)	TLV® Basis: Simple Asphyxiant
Regulatory reference	ACGIH 2023

DNEL (Derived-No Effect Level) : None established.

PNEC (Predicted No-Effect Concentration) : None established.

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Provide adequate general and local exhaust ventilation.
Product to be handled in a closed system.
Systems under pressure should be regularly checked for leakages.
Ensure exposure is below occupational exposure limits (where available).
Gas detectors should be used when flammable gases/vapours may be released.
Consider the use of a work permit system e.g. for maintenance activities.

8.2.2. Individual protection measures, e.g. personal protective equipment

A risk assessment should be conducted and documented in each work area to assess the risks related to the use of the product and to select the PPE that matches the relevant risk.
The following recommendations should be considered:
PPE compliant to the recommended EN/ISO standards should be selected.

- Eye/face protection : Wear safety glasses with side shields.
Standard EN 166 - Personal eye-protection - specifications.
- Skin protection :
 - Hand protection : Wear working gloves when handling gas containers.
Standard EN 388 - Protective gloves against mechanical risks, performance level 1 or higher.
 - Other : Consider the use of flame resistant anti-static safety clothing.
Standard EN ISO 14116 - Limited flame spread materials.
Standard EN 1149-5 - Protective clothing: Electrostatic properties.
Wear safety shoes while handling containers.
Standard EN ISO 20345 - Personal protective equipment - Safety footwear.
- Respiratory protection : Standard EN 137 - Self-contained open-circuit compressed air breathing apparatus with full face mask.
When indicated by a risk assessment, Respiratory Protective Equipment must be used. The selection of the Respiratory Protective Device (RPD) must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected RPD.
Self contained breathing apparatus is recommended, where unknown exposure may be expected, e.g. during maintenance activities on installation systems.
- Thermal hazards : None in addition to the above sections.

8.2.3. Environmental exposure controls

Refer to local regulations for restriction of emissions to the atmosphere. See section 13 for specific methods for waste gas treatment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	
- Physical state at 20°C / 101.3kPa	: Gas.
- Colour	: Colourless.
Odour	: Odour threshold is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odour: Stenchant often added. Sweetish.
Melting point / Freezing point	: Not applicable for gases and gas mixtures.
Boiling point	: Not applicable for gas mixtures. It is technically not possible to determine the boiling point or range of this mixture. Component with lowest boiling point: Nitrogen -196 °C
Flammability	: Flammable gas.
Lower explosion limit	: Calculated value: 12.59%
Upper explosion limit	: No test data or calculation method available.
Flash point	: Not applicable for gases and gas mixtures.
Auto-ignition temperature	: Not known. Auto ignition temperature for mixtures is not available. Component with lowest auto-ignition temperature: Propane 470 °C
Decomposition temperature	: Not applicable.
pH	: Not applicable for gases and gas mixtures.
Viscosity, kinematic	: Not applicable for gases and gas mixtures.
Water solubility [20°C]	: Mixture is partially soluble in water
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure [20°C]	: Not applicable.
Vapour pressure [50°C]	: Not applicable.
Density and/or relative density	: Not applicable.
Relative vapour density (air=1)	: Lighter or similar to air.
Particle characteristics	: Not applicable for gases and gas mixtures.

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Explosion limits	: Flammability range not available.
Oxidising properties	: No oxidising properties.

9.2.2. Other safety characteristics

Other data	: None.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Data for mixtures are not available.
This mixture contains components with the following reactivity : Can form explosive mixture with air. May react violently with oxidants.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Can form explosive mixture with air.
May react violently with oxidants.

10.4. Conditions to avoid

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
Avoid moisture in installation systems.

10.5. Incompatible materials

Air, Oxidisers.
For additional information on compatibility refer to ISO 11114.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity : Classification criteria are not met.

Propane (74-98-6)

LC50 Inhalation - Rat [ppm]	20000 ppm/4h
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Skin corrosion/irritation : No known effects from this product.

Serious eye damage/irritation : No known effects from this product.

Respiratory or skin sensitisation : No known effects from this product.

Germ cell mutagenicity : No known effects from this product.

Carcinogenicity : No known effects from this product.

Toxic for reproduction : Fertility : No known effects from this product.

Toxic for reproduction : unborn child : No known effects from this product.

STOT-single exposure : No known effects from this product.

STOT-repeated exposure : No known effects from this product.

Aspiration hazard : Not applicable for gases and gas mixtures.

11.2. Information on other hazards

Other information : The substance/mixture has no endocrine disrupting properties.

SECTION 12: Ecological information

12.1. Toxicity

Assessment : Classification criteria are not met.

EC50 48h - Daphnia magna [mg/l] : No data available.

EC50 72h - Algae [mg/l] : No data available.

LC50 96 h - Fish [mg/l] : No data available.

Ethane (74-84-0)

EC50 48h - Daphnia magna [mg/l]	7.02 - 69.43 mg/l
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EC50 72h - Algae [mg/l]	7.71 - 16.5 mg/l
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LC50 96 h - Fish [mg/l]	24.11 - 147.54 mg/l
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Propane (74-98-6)

EC50 48h - Daphnia magna [mg/l]	27.1 mg/l
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EC50 72h - Algae [mg/l]	11.9 mg/l
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Propane (74-98-6)

LC50 96 h - Fish [mg/l]	49.9 mg/l
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Nitrogen (7727-37-9)

EC50 48h - Daphnia magna [mg/l]	No data available.
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EC50 72h - Algae [mg/l]	No data available.
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LC50 96 h - Fish [mg/l]	No data available.
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12.2. Persistence and degradability

Assessment : No data available.

12.3. Bioaccumulative potential

Assessment : No data available.

12.4. Mobility in soil

Assessment : Because of its high volatility, the product is unlikely to cause ground or water pollution.
Partition into soil is unlikely.

12.5. Results of PBT and vPvB assessment

Assessment : Not classified as PBT or vPvB.

12.6. Endocrine disrupting properties

Assessment : The substance/mixture has no endocrine disrupting properties.

12.7. Other adverse effects

Other adverse effects : No known effects from this product.

Effect on the ozone layer : No effect on the ozone layer.

Effect on global warming : Contains greenhouse gas(es).

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Contact supplier if guidance is required.

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.

Ensure that the emission levels from local regulations or operating permits are not exceeded.

Refer to the EIGA code of practice Doc.30 "Disposal of Gases", downloadable at <http://www.eiga.org> for more guidance on suitable disposal methods.

Return unused product in original container to supplier.

List of hazardous waste codes (from Commission Decision 2000/532/EC as amended) : 16 05 04 *: Gases in pressure containers (including halons) containing hazardous substances.

13.2. Additional information

External treatment and disposal of waste should comply with applicable local and/or national regulations.

SECTION 14: Transport information

14.1. UN number or ID number

In accordance with ADR / RID / IMDG / IATA / ADN

UN-No. : 1954

14.2. UN proper shipping name

Transport by road/rail/inland waterways (ADR/RID/ADN)	: COMPRESSED GAS, FLAMMABLE, N.O.S. (Ethane, Propane)
Transport by air (ICAO-TI / IATA-DGR)	: Compressed gas, flammable, n.o.s. (Ethane, Propane)
Transport by sea (IMDG)	: COMPRESSED GAS, FLAMMABLE, N.O.S. (Ethane, Propane)

14.3. Transport hazard class(es)

Labelling



2.1 : Flammable gases.

Transport by road/rail/inland waterways (ADR/RID/ADN)

Class	: 2
Classification code	: 1F
Hazard identification number	: 23
Tunnel Restriction	: B/D - Tank carriage: Passage forbidden through tunnels of category B, C, D and E. Other carriage: Passage forbidden through tunnels of category D and E

Transport by air (ICAO-TI / IATA-DGR)

Class / Div. (Sub. risk(s))	: 2.1
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Transport by sea (IMDG)

Class / Div. (Sub. risk(s))	: 2.1
Emergency Schedule (EmS) - Fire	: F-D
Emergency Schedule (EmS) - Spillage	: S-U

14.4. Packing group

Transport by road/rail/inland waterways (ADR/RID/ADN)	: Not applicable.
Transport by air (ICAO-TI / IATA-DGR)	: Not applicable.
Transport by sea (IMDG)	: Not applicable.

14.5. Environmental hazards

Transport by road/rail/inland waterways (ADR/RID/ADN)	: None.
Transport by air (ICAO-TI / IATA-DGR)	: None.
Transport by sea (IMDG)	: None.

14.6. Special precautions for user

Packing Instruction(s)

Transport by road/rail/inland waterways (ADR/RID/ADN)	: P200.
Transport by air (ICAO-TI / IATA-DGR)	
Passenger and Cargo Aircraft	: Forbidden.
Cargo Aircraft only	: 200.
Transport by sea (IMDG)	: P200.

Special transport precautions

- : Avoid transport on vehicles where the load space is not separated from the driver's compartment.
- 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 there is adequate ventilation.
 - Ensure that containers are firmly secured.
 - Ensure valve is closed and not leaking.
 - Ensure valve outlet cap nut or plug (where provided) is correctly fitted.
 - Ensure valve protection device (where provided) is correctly fitted.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU-Regulations

- Restrictions on use : Contains no substance(s) listed on the REACH Candidate List.
Other information, restriction and prohibition regulations : Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals).
Seveso Directive : 2012/18/EU (Seveso III) : Covered.

National regulations

- Water hazard class (WGK) : nwg - Non-hazardous to water.
Regulatory reference : Ensure all national/local regulations are observed.

15.2. Chemical safety assessment

A CSA does not need to be carried out for this product.

SECTION 16: Other information

- Indication of changes : Safety data sheet in accordance with commission regulation (EU) No 2020/878.
- Abbreviations and acronyms : ATE - Acute Toxicity Estimate.
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008.
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
EINECS - European Inventory of Existing Commercial Chemical Substances.
CAS# - Chemical Abstract Service number.
PPE - Personal Protection Equipment.
LC50 - Lethal Concentration to 50 % of a test population.
RMM - Risk Management Measures.
PBT - Persistent, Bioaccumulative and Toxic.
vPvB - Very Persistent and Very Bioaccumulative.
STOT- SE : Specific Target Organ Toxicity - Single Exposure.
CSA - Chemical Safety Assessment.
EN - European Standard.
UN - United Nations.
ADR - Agreement concerning the International Carriage of Dangerous Goods by Road.
IATA - International Air Transport Association.
IMDG code - International Maritime Dangerous Goods.
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail.
WGK - Water Hazard Class.
STOT - RE : Specific Target Organ Toxicity - Repeated Exposure.
UFI : Unique Formula Identifier.
- Training advice : Ensure operators understand the flammability hazard.
- Further information : Classification using data from databases maintained by the European Industrial Gases Association (EIGA). Data is maintained in EIGA doc 169 : 'Classification and Labelling Guide', downloadable at : <http://www.eiga.eu>.
Classification in accordance with the procedures and calculation methods of Regulation (EC) 1272/2008 (CLP).

Full text of H- and EUH-statements

Flam. Gas 1A	Flammable gases, Category 1A
Flam. Gas 1B	Flammable gases, Category 1B

Safety Data Sheet

≤12% Ethane & ≤5% Propane in Nitrogen

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878
Reference number: SDS 01525

H220	Extremely flammable gas.
H221	Flammable gas.
H280	Contains gas under pressure; may explode if heated.
Press. Gas (Comp.)	Gases under pressure : Compressed gas
Press. Gas (Liq.)	Gases under pressure : Liquefied gas

DISCLAIMER OF LIABILITY

: Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out.
Details given in this document are believed to be correct at the time of going to press.
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.

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