

Version #: 03

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

### 1.1. Product identifier

<b>Name of the substance</b>	Propane
<b>Identification number</b>	601-003-00-5 (Index number)
<b>Registration number</b>	01-2119486944-21-0063
<b>Synonyms</b>	None.
<b>SDS number</b>	WC002

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

<b>Identified uses</b>	Soldering and brazing.
<b>Uses advised against</b>	None known.

### 1.3. Details of the supplier of the safety data sheet

<b>Manufacturer/Supplier</b>	Worthington Enterprises
<b>Address</b>	Beim Flaschenwerk 1, A-3291 Kienberg bei Gaming Austria
<b>E-mail</b>	SDSRequest@WTHG.com
<b>Telephone</b>	1-800-359-9678
<b>Emergency Telephone</b>	CHEMTREC 1-703-527-3887 (International) (CCN 628056)

### 1.4. Emergency telephone number

<b>General in EU</b>	112 (Available 24 hours a day. SDS/Product information may not be available for the Emergency Service.)
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## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

The substance has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

#### Classification according to Regulation (EC) No 1272/2008 as amended

##### Physical hazards

Flammable gases	Category 1A	H220 - Extremely flammable gas.
Gases under pressure	Liquefied gas	H280 - Contains gas under pressure; may explode if heated.

### 2.2. Label elements

#### Label according to Regulation (EC) No. 1272/2008 as amended

##### Hazard pictograms



**Signal word** Danger

##### Hazard statements

H220	Extremely flammable gas.
H280	Contains gas under pressure; may explode if heated.

##### Precautionary statements

###### Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.

###### Response

P377	Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
P381	In case of leakage, eliminate all ignition sources.

**Storage**

P410 + P403

Protect from sunlight. Store in a well-ventilated place.

**Disposal**

Not assigned.

**Supplemental information on the label**

None.

**2.3. Other hazards**

May displace oxygen and cause rapid suffocation.

Contact with liquefied gas may cause frostbite.

This substance does not meet vPvB / PBT criteria of Regulation (EC) No 1907/2006, Annex XIII.

The substance is not included in the list established in accordance with REACH Article 59(1) for having endocrine disrupting properties.

The substance is not considered to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

**SECTION 3: Composition/information on ingredients****3.1. Substances****General information**

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Propane	87.5 - 100	74-98-6 200-827-9	01-2119486944-21-0063	601-003-00-5	
<b>Classification:</b> Flam. Gas 1A;H220, Press. Gas;H280					U

**Additives**

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Ethyl mercaptan	< 0.005	75-08-1 200-837-3	-	016-022-00-9	

**Constituents**

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Propylene	0 - 10	115-07-1 204-062-1	-	601-011-00-9	
Ethane	0 - 7	74-84-0 200-814-8	-	601-002-00-X	
Butane	0 - 2.5	106-97-8 203-448-7	-	601-004-01-8	

**List of abbreviations and symbols that may be used above**

Note U (Table 3.1): When put on the market gases have to be classified as "Gases under pressure", in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case.

**Composition comments**

The full text for all H-statements is displayed in section 16.

Gas concentrations are in percent by volume.

**SECTION 4: First aid measures****General information**

First aid personnel must be aware of own risk during rescue. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

**4.1. Description of first aid measures****Inhalation**

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory tract irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

**Skin contact**

Not likely, due to the form of the product. If frostbite occurs, immerse affected area in warm water (not exceeding 105°F/41°C). Keep immersed for 20 to 40 minutes. Get medical attention immediately.

**Eye contact**

Not likely, due to the form of the product. If frostbite occurs, immediately flush eyes with plenty of warm water (not exceeding 105°F/41°C) for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention promptly if symptoms persist or occur after washing.

**Ingestion**

This material is a gas under normal atmospheric conditions and ingestion is unlikely.

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

Exposure to rapidly expanding gas or vapourizing liquid may cause frostbite ("cold burn"). Very high exposure can cause suffocation from lack of oxygen. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation. Asphyxiation may bring about unconsciousness without warning and so rapidly that victim may be unable to protect himself.

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

Exposure may aggravate pre-existing respiratory disorders. Provide general supportive measures and treat symptomatically.

## SECTION 5: Firefighting measures

**General fire hazards** Extremely flammable gas. Contents under pressure. Pressurised container may explode when exposed to heat or flame.

### 5.1. Extinguishing media

**Suitable extinguishing media** Dry chemical powder. Carbon dioxide (CO<sub>2</sub>). Water fog. Foam.

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

### 5.2. Special hazards arising from the substance or mixture

Extremely flammable gas. May form explosive mixtures with air. Gas may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.

### 5.3. Advice for firefighters

**Special protective equipment for firefighters** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

#### Special fire fighting procedures

Do not extinguish fires unless gas flow can be stopped safely; explosive re-ignition may occur. Promptly isolate the scene by removing all persons from the vicinity of the incident. No action shall be taken involving any personal risk or without suitable training. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus. Stop flow of material. Use water to keep fire exposed containers cool and to protect personnel effecting shutoff. If a leak or spill has not ignited, use water spray to disperse the vapors and to protect personnel attempting to stop leak. Prevent runoff from fire control or dilution from entering streams, sewers or drinking water supply.

### Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials. Cool containers exposed to flames with water until well after the fire is out.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** Evacuate the area promptly. Keep unnecessary personnel away. Wear appropriate personal protective equipment.

**For emergency responders** No action shall be taken involving any personal risk or without suitable training. In the event of a leak evacuate all personnel until ventilation can restore oxygen concentrations to safe levels. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Wear appropriate protective equipment and clothing during clean-up.

### 6.2. Environmental precautions

Should not be released into the environment. Prevent further leakage or spillage if safe to do so.

### 6.3. Methods and material for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. Stop leak if you can do so without risk. If possible, turn leaking containers so that gas escapes rather than liquid. Isolate area until gas has dispersed.

### 6.4. Reference to other sections

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not smoke. All equipment used when handling the product must be grounded. Do not breathe gas. Avoid prolonged exposure. Do not enter storage areas or confined spaces unless adequately ventilated. Use only outdoors or in a well-ventilated area. Oxygen concentration should not fall below 19.5 % at sea level (pO<sub>2</sub> = 135 mmHg). Mechanical ventilation or local exhaust ventilation may be required. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

## 7.2. Conditions for safe storage, including any incompatibilities

Do not store, incinerate, or heat this material above 120 degrees Fahrenheit. Keep away from heat, sparks and open flame. This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Protect cylinders from damage. Stored containers should be periodically checked for general condition and leakage. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

ANNEX 1, PART 1 Categories of dangerous substances

Hazard categories in accordance with Regulation (EC) No 1272/2008

- P2 FLAMMABLE GASES (Lower-tier requirements = 10 tonnes; Upper-tier requirements = 50 tonnes)

ANNEX 1, PART 2 Named dangerous substances

- 18. Liquefied flammable gases, Category 1 or 2 (including LPG) and natural gas (Lower-tier requirements = 50 tonnes; Upper-tier requirements = 200 tonnes)

## 7.3. Specific end use(s)

Soldering and brazing. Observe industrial sector guidance on best practices.

# SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

### Occupational exposure limits

Ireland. OELVs, Schedules 1 & 2, Code of Practise for Chemical Agents and Carcinogens Regulations

Constituents	Type	Value
Propylene (CAS 115-07-1)	TWA	500 ppm
Butane (CAS 106-97-8)	STEL	1000 ppm

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Recommended monitoring procedures

Follow standard monitoring procedures.

### Derived no effect levels (DNELs)

Not available.

### Predicted no effect concentrations (PNECs)

Not available.

### Exposure guidelines

Follow standard monitoring procedures.

## 8.2. Exposure controls

### Appropriate engineering controls

Provide adequate ventilation and minimize the risk of inhalation of gas. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

### Individual protection measures, such as personal protective equipment

#### General information

Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

#### Eye/face protection

Wear approved safety glasses or goggles. Face shield is recommended. Eye protection should meet standard EN 166.

#### Skin protection

##### - Hand protection

Wear suitable gloves tested to EN374. Wear cold insulating gloves.

##### - Other

Wear protective clothing appropriate for the risk of exposure.

#### Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Wear positive pressure self-contained breathing apparatus (SCBA).

WARNING! Air-purifying respirators do not protect workers in oxygen deficient atmospheres.

#### Thermal hazards

Contact with liquefied gas might cause frostbites, in some cases with tissue damage. Wear appropriate thermal protective clothing, when necessary.

### Hygiene measures

Do not eat, drink or smoke when using the product. Wash thoroughly after handling. Provide eyewash station and safety shower. Handle in accordance with good industrial hygiene and safety practices.

### Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	Gas.
Form	Compressed liquefied gas.
Colour	Colourless.
Odour	Rotten egg.
Odour threshold	Property has not been measured.
Melting point/freezing point	-188 °C (-306.4 °F)
Boiling point or initial boiling point and boiling range	-42 °C (-43.6 °F) 14.7 psia
Flammability	Extremely flammable gas.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	2.15 %
Explosive limit – upper (%)	9.6 %
Flash point	-104 °C (-155.2 °F)
Auto-ignition temperature	432 °C (809.6 °F)
Decomposition temperature	Property has not been measured.
pH	Not applicable, material is a gas.
Kinematic viscosity	Not applicable, material is a gas.
Solubility	
Solubility (water)	Slightly soluble in water.
Partition coefficient (n-octanol/water) (log value)	1.77
Vapour pressure	127 psig (21°C / 70°F)
Density and/or relative density	
Relative density	1.5 (vapour) (Air=1) (15 °C (59 °F)) 0.504 (liquid)
Vapour density	Property has not been measured.
Particle characteristics	
Particle size	Not applicable, material is a gas.

### 9.2. Other information

9.2.1. Information with regard to physical hazard classes No relevant additional information available.

### 9.2.2. Other safety characteristics

Dynamic viscosity	0.08 mPa.s (17.9 °C (64.22 °F))
Evaporation rate	Property has not been measured.
Heat of combustion (NFPA 30B)	44 kJ/g
Limiting Oxygen Concentration (or LOC)	9.8 %
Molecular weight	45 g/mol
Percent volatile	100 %
Surface tension	16 mN/m (-47 °C (-52.6 °F))
Viscosity	Not applicable, material is a gas.

## SECTION 10: Stability and reactivity

10.1. Reactivity	Reacts violently with strong oxidants, nitrites, inorganic chlorides, chlorites and perchlorates causing fire and explosion hazard.
10.2. Chemical stability	Stable under normal temperature conditions and recommended use.
10.3. Possibility of hazardous reactions	Polymerization will not occur. May form explosive mixture with air. This product may react with oxidizing agents.
10.4. Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
10.5. Incompatible materials	Strong oxidising agents. Halogens. Nitrates.

**10.6. Hazardous decomposition products**

Thermal decomposition of this product can generate carbon monoxide and carbon dioxide. Hydrocarbons.

**SECTION 11: Toxicological information**

**General information** Occupational exposure to the substance or mixture may cause adverse effects.

**Information on likely routes of exposure**

- Inhalation** High concentrations: Suffocation (asphyxiant) hazard - if allowed to accumulate to concentrations that reduce oxygen below safe breathing levels. Breathing of high concentrations may cause dizziness, light-headedness, headache, nausea and loss of co-ordination. Continued inhalation may result in unconsciousness.
- Skin contact** Contact with liquefied gas may cause frostbite.
- Eye contact** Contact with liquefied gas may cause frostbite.
- Ingestion** This material is a gas under normal atmospheric conditions and ingestion is unlikely.

**Symptoms** Exposure to rapidly expanding gas or vapourizing liquid may cause frostbite ("cold burn"). Very high exposure can cause suffocation from lack of oxygen. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation. Asphyxiation may bring about unconsciousness without warning and so rapidly that victim may be unable to protect himself.

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

**Acute toxicity** Not expected to be acutely toxic.

Product	Species	Test Results
Propane (CAS 74-98-6)		
<b>Acute</b>		
<b>Inhalation</b>		
Gas		
LC50	Rat	> 80000 ppm, 15 Minutes
Constituents	Species	Test Results

Propylene (CAS 115-07-1)		
<b>Acute</b>		
<b>Inhalation</b>		
Gas		
LC50	Rat	> 65000 ppm, 4 Hours

- Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- Serious eye damage/eye irritation** Based on available data, the classification criteria are not met.
- Respiratory sensitisation** Based on available data, the classification criteria are not met.
- Skin sensitisation** Based on available data, the classification criteria are not met.
- Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- Carcinogenicity** Based on available data, the classification criteria are not met.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Propylene (CAS 115-07-1) 3 Not classifiable as to carcinogenicity to humans.

- Reproductive toxicity** Based on available data, the classification criteria are not met.
- Specific target organ toxicity - single exposure** Based on available data, the classification criteria are not met.
- Specific target organ toxicity - repeated exposure** Based on available data, the classification criteria are not met.
- Aspiration hazard** Not relevant, due to the form of the product.
- Mixture versus substance information** No information available.

**11.2. Information on other hazards**

- Endocrine disrupting properties** This substance does not have endocrine disrupting properties with respect to human health, as it does not meet the assessment criteria laid out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605.
- Other information** Exposure over a long period of time may cause central nervous system effects.

**SECTION 12: Ecological information**

**12.1. Toxicity** The product is not expected to be hazardous to the environment.

<b>12.2. Persistence and degradability</b>	Not relevant, due to the form of the product.
<b>12.3. Bioaccumulative potential</b>	Not relevant, due to the form of the product.
<b>Partition coefficient n-octanol/water (log Kow)</b>	Not available.
Propylene (CAS 115-07-1)	1.77
Butane (CAS 106-97-8)	2.89
Ethane (CAS 74-84-0)	1.81
<b>Bioconcentration factor (BCF)</b>	Not available.
<b>12.4. Mobility in soil</b>	Not relevant, due to the form of the product.
<b>12.5. Results of PBT and vPvB assessment</b>	This substance does not meet vPvB / PBT criteria of Regulation (EC) No 1907/2006, Annex XIII.
<b>12.6. Endocrine disrupting properties</b>	This substance does not have endocrine disrupting properties with respect to the environment, as it does not meet the assessment criteria laid out in Regulations (EC) No 1907/2006, (EU) No 2017/2100 and (EU) 2018/605.
<b>12.7. Other adverse effects</b>	The product contains volatile organic compounds which have a photochemical ozone creation potential.
<b>Substance Global Warming Potential per (Annex IV), Regulation 517/2014/EU on fluorinated greenhouse gases, as amended</b>	
Butane (CAS 106-97-8)	4
Ethane (CAS 74-84-0)	6
Propane (CAS 74-98-6)	3
Propylene (CAS 115-07-1)	2

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Residual waste</b>	Dispose in accordance with all applicable regulations.
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal.
<b>EU waste code</b>	16 05 04* The waste code should be assigned in discussion between the user, the producer and the waste disposal company. The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Disposal methods/information</b>	Use the container until empty. Do not dispose of any non-empty container. Empty containers have residual vapor that is flammable and explosive. Cylinders should be emptied and returned to a hazardous waste collection point. Do not puncture or incinerate even when empty. Dispose in accordance with all applicable regulations.
<b>Special precautions</b>	Dispose of in accordance with local regulations.

## SECTION 14: Transport information

### ADR

<b>14.1. UN number</b>	UN1978
<b>14.2. UN proper shipping name</b>	PROPANE
<b>14.3. Transport hazard class(es)</b>	
Class	2.1
Subsidiary hazard	-
Label(s)	2.1
Hazard No. (ADR)	23
Tunnel restriction code	B/D
<b>14.4. Packing group</b>	-
<b>14.5. Environmental hazards</b>	No.
<b>14.6. Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

### RID

<b>14.1. UN number</b>	UN1978
<b>14.2. UN proper shipping name</b>	PROPANE
<b>14.3. Transport hazard class(es)</b>	
Class	2.1
Subsidiary hazard	-
Label(s)	2.1(+13)
<b>14.4. Packing group</b>	-
<b>14.5. Environmental hazards</b>	No.

**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

#### ADN

**14.1. UN number** UN1978  
**14.2. UN proper shipping name** PROPANE

**14.3. Transport hazard class(es)**

**Class** 2.1  
**Subsidiary hazard** -  
**Label(s)** 2.1

**14.4. Packing group** -

**14.5. Environmental hazards** No.

**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

#### IATA

**14.1. UN number** UN1978  
**14.2. UN proper shipping name** Propane

**14.3. Transport hazard class(es)**

**Class** 2.1  
**Subsidiary hazard** -

**14.4. Packing group** -

**14.5. Environmental hazards** No.

**ERG Code** 10L

**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

#### IMDG

**14.1. UN number** UN1978  
**14.2. UN proper shipping name** PROPANE

**14.3. Transport hazard class(es)**

**Class** 2.1  
**Subsidiary hazard** -

**14.4. Packing group** -

**14.5. Environmental hazards**

**Marine pollutant** No

**EmS** F-D, S-U

**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**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

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**

Not listed.

**Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

#### Authorisations



**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended**

Not listed.

**Restrictions on use**

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use, as amended - Conditions of restriction given for the associated entry number should be considered**

Propylene (CAS 115-07-1) 40  
Butane (CAS 106-97-8)

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.**

Butane (CAS 106-97-8)

**Regulation 2019/1148 on Marketing and Use of Explosive Precursors, Annex I, as amended**

Not listed.

**Regulation 2019/1148 on Marketing and Use of Explosive Precursors, Annex II, as amended**

Not listed.

**Other EU regulations**

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

ANNEX 1, PART 1 Categories of dangerous substances  
Hazard categories in accordance with Regulation (EC) No 1272/2008  
- P2 FLAMMABLE GASES

ANNEX 1, PART 2 Named dangerous substances  
- 18. Liquefied flammable gases, Category 1 or 2 (including LPG) and natural gas

**Other regulations**

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended. According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878.

**National regulations**

Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended. Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

**15.2. Chemical safety assessment**

No Chemical Safety Assessment has been carried out.

**SECTION 16: Other information**

**List of abbreviations**

ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways.  
ADR: Agreement concerning the International Carriage of Dangerous Goods by Road.  
CAS: Chemical Abstract Service.  
CEN: European Committee for Standardization.  
IATA: International Air Transport Association.  
IMDG: International Maritime Dangerous Goods.  
IMO: International Maritime Organization.  
LC50: Lethal Concentration 50%.  
PBT: Persistent, bioaccumulative and toxic.  
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.  
STEL: Short-Term Exposure Limit.  
TWA: Time Weighted Average.  
vPvB: Very persistent and very bioaccumulative.

**References**

ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices  
ECHA: European Chemical Agency.  
EPA: AQUIRE database  
HSDB® - Hazardous Substances Data Bank  
IARC Monographs. Overall Evaluation of Carcinogenicity  
National Toxicology Program (NTP) Report on Carcinogens  
NLM: Hazardous Substances Data Base

**Information on evaluation method leading to the classification of mixture**

Not applicable. The product is a substance.

**Full text of any statements, which are not written out in full under sections 2 to 15**

H220 Extremely flammable gas.  
H280 Contains gas under pressure; may explode if heated.

**Training information**

Follow training instructions when handling this material.

**Disclaimer**

All information in this Safety Data Sheet is believed to be accurate and reliable. However, no guarantee or warranty of any kind is made with regard to the accuracy of information or the suitability of the recommendations contained herein. It is the user's responsibility to assess the safety and toxicity of this product under their own conditions of use and to comply with all applicable laws and regulations.