

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

1.1. Product identifier

| | |
|------------------------------|-----------------------------|
| Name of the substance | Propane |
| Identification number | 601-003-00-5 (Index number) |
| Registration number | 01-2119486944-21-0063 |
| Synonyms | None. |
| SDS number | WC002 |
| Issue date | 11-April-2014 |
| Version number | 05 |
| Revision date | 11-December-2023 |
| Supersedes date | 21-March-2021 |

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

| | |
|-----------------------------|------------------------|
| Identified uses | Soldering and brazing. |
| Uses advised against | None known. |

1.3. Details of the supplier of the safety data sheet

| | |
|------------------------------|--|
| Manufacturer/Supplier | Worthington Cylinders GmbH |
| Address | 2 Kingsthorpe Park, Henson Way Kettering, Northants, NN16 8PX United Kingdom |
| E-mail | SDSRequest@worthingtonindustries.com |
| Telephone | 1-800-359-9678 |

1.4. Emergency telephone number

CHEMTREC

+44 20 3807 3798
(CCN 628056)

General emergency 112 or 999 SDS/Product information may not be available for the Emergency Service.

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. |

ResponseP377
P381Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
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.

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 | |
| Classification: 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 (CO₂). 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 (pO₂ = 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. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. 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

UK. OELs. Workplace Exposure Limits (WELs) (EH40/2005 (Fourth Edition 2020)), Table 1

| Constituents | Type | Value |
|-----------------------|------|------------------------|
| Butane (CAS 106-97-8) | STEL | 1810 mg/m ³ |
| | | 750 ppm |
| | TWA | 1450 mg/m ³ |
| | | 600 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****Appearance**

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

9.2. Other information

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

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 themselves.

11.1. Information on toxicological effects

Acute toxicity Not expected to be acutely toxic.

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

| | | |
|--------------------------|-----|----------------------|
| Propylene (CAS 115-07-1) | | |
| Acute | | |
| Inhalation | | |
| 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.

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.

12.2. Persistence and degradability Not relevant, due to the form of the product.

12.3. Bioaccumulative potential Not relevant, due to the form of the product.

Partition coefficient n-octanol/water (log Kow) Not available.

| | |
|--------------------------|------|
| Propylene (CAS 115-07-1) | 1.77 |
| Butane (CAS 106-97-8) | 2.89 |
| Ethane (CAS 74-84-0) | 1.81 |

| | |
|---|--|
| Bioconcentration factor (BCF) | Not available. |
| 12.4. Mobility in soil | Not relevant, due to the form of the product. |
| 12.5. Results of PBT and vPvB assessment | This substance does not meet vPvB / PBT criteria of Regulation (EC) No 1907/2006, Annex XIII. |
| 12.6. Other adverse effects | The product contains volatile organic compounds which have a photochemical ozone creation potential. |

Substance Global Warming Potential per (Annex IV), Regulation 517/2014/EU on fluorinated greenhouse gases, as amended

| | |
|--------------------------|---|
| 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

| | |
|-------------------------------------|---|
| Residual waste | Dispose in accordance with all applicable regulations. |
| Contaminated packaging | Empty containers should be taken to an approved waste handling site for recycling or disposal. |
| EU waste code | 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. |
| Disposal methods/information | 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. |
| Special precautions | Dispose of in accordance with local regulations. |

SECTION 14: Transport information

ADR

| | |
|---|---|
| 14.1. UN number | UN1075 |
| 14.2. UN proper shipping name | PETROLEUM GASES, LIQUEFIED |
| 14.3. Transport hazard class(es) | |
| Class | 2.1 |
| Subsidiary risk | - |
| Label(s) | 2.1 |
| Hazard No. (ADR) | 23 |
| Tunnel restriction code | B/D |
| 14.4. Packing group | - |
| 14.5. Environmental hazards | No |
| 14.6. Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |

RID

| | |
|---|---|
| 14.1. UN number | UN1075 |
| 14.2. UN proper shipping name | PETROLEUM GASES, LIQUEFIED |
| 14.3. Transport hazard class(es) | |
| Class | 2.1 |
| Subsidiary risk | - |
| Label(s) | 2.1 (+13) |
| 14.4. Packing group | - |
| 14.5. Environmental hazards | No |
| 14.6. Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |

ADN

| | |
|---|----------------------------|
| 14.1. UN number | UN1075 |
| 14.2. UN proper shipping name | PETROLEUM GASES, LIQUEFIED |
| 14.3. Transport hazard class(es) | |
| Class | 2.1 |
| Subsidiary risk | - |

| | |
|---|---|
| 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 | UN1075 |
| 14.2. UN proper shipping name | Petroleum gases, liquefied |
| 14.3. Transport hazard class(es) | |
| Class | 2.1 |
| Subsidiary risk | - |
| 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 | UN1075 |
| 14.2. UN proper shipping name | PETROLEUM GASES, LIQUEFIED |
| 14.3. Transport hazard class(es) | |
| Class | 2.1 |
| Subsidiary risk | - |
| 14.4. Packing group | - |
| 14.5. Environmental hazards | |
| Marine pollutant | No |
| EmS | E-D, S-U |
| 14.6. Special precautions for user | Read safety instructions, SDS and emergency procedures before handling. |

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

Retained direct 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 authorization, 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)

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

This product is classified and labelled in accordance with the retained CLP Regulation (EC) No 1272/2008, as amended for Great Britain. This Safety Data Sheet is compiled in accordance with REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758.

Use of this product by young persons under the age of 18 is not allowed in accordance with the Management of Health and Safety at Work Regulations 1999 [SI 1999/3242], as amended. Follow the requirements of the Control of Substances Hazardous to Health Regulations 2002 [SI 2002/2677], as amended, when using this material.

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.

IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.

IMDG: International Maritime Dangerous Goods.

MARPOL: International Convention for the Prevention of Pollution from Ships.

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.