



# C4 Fraction

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878  
Issue date: 5/25/2007 Revision date: 12/19/2022 Version: 5.0

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

#### 1.1. Product identifier

Chemical type : Substance  
Trade name : C4 Fraction  
Trade name : C4 Fraction  
EC-No. : 270-691-3  
CAS-No. : 68476-52-8  
REACH registration No : 01-2119473796-21-0017  
Product code : 19900008  
IUPAC name : Hydrocarbons, C4, ethylene-manuf.-by-product  
Formula : C16H30

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

##### 1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use  
Industrial/Professional use spec : Manufacture of substance  
Distribution of substance  
Formulation & (re)packing of substances and mixtures  
Use as an intermediate  
Polymer production  
Use as a fuel  
Uses in Coatings  
Polymer processing  
Function or use category : Fuels, Intermediates, Solvents

##### 1.2.2. Uses advised against

No additional information available

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

##### Manufacturer

SLOVNAFT, a.s. a.s.  
Vlčie hrdlo 1  
SK- 824 12 Bratislava  
Slovakia  
T +421-(0)2/4055-1111 - F +421-(0)2/5859-9759  
[info@slovnaft.sk](mailto:info@slovnaft.sk) - [www.slovnaft.sk](http://www.slovnaft.sk)

#### 1.4. Emergency telephone number

Emergency number : Podnikový dispečing 1: ++0421(0)2/4055 3344

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
Israel	Israel Poison Information Center Rambam Health Care Campus	6 Ha'Aliya Street 31096 Haifa	+972 4 854 1900	

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Country	Organisation/Company	Address	Emergency number	Comment
Malta	Medicines & Poisons Info Office	Mater Dei Hospital MSD 2090 Msida	+356 2545 6508	
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA Belfast	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Cardiff Centre) University Hospital Llandough	Penlan Road CF64 2XX Cardiff	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Edinburgh Centre) Royal Infirmary of Edinburgh	Little France Crescent EH16 4SA Edinburgh	0344 892 0111	Only for healthcare professionals
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188	
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre	16/17 Framlington Place Newcastle-upon-Tyne NE2 4AB Newcastle	0344 892 0111	Only for healthcare professionals

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

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

Flammable gases, Category 1A	H220
Gases under pressure : Compressed gas	H280
Germ cell mutagenicity, Category 1B	H340
Carcinogenicity (inhalation) Category 1A	H350i

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

##### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Hazard statements (CLP)

: H220 - Extremely flammable gas.  
H280 - Contains gas under pressure; may explode if heated.  
H340 - May cause genetic defects.  
H350i - May cause cancer by inhalation.

Precautionary statements (CLP)

: P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.  
No smoking.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P308+P313 - IF exposed or concerned: Get medical advice/attention.

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P377 - Leaking gas fire: Do not extinguish, unless leak can be stopped safely.  
P381 - In case of leakage, eliminate all ignition sources.  
P403 - Store in a well-ventilated place.  
P405 - Store locked up.  
P410+P403 - Protect from sunlight. Store in a well-ventilated place.  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 2.3. Other hazards

Endocrine disruptors: not yet evaluated

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Substance type : UVCB  
Name : SPC /270-691-3/ Hydrocarbons C4, ethylene – manufactured by product  
CAS-No. : 68476-52-8  
EC-No. : 270-691-3

Name	Product identifier	%
SPC /270-691-3/ Hydrocarbons C4, ethylene – manufactured by product	CAS-No.: 68476-52-8 EC-No.: 270-691-3 REACH-no: 01-2119473796-21-0017	100
1,3-butadiene	CAS-No.: 106-99-0 EC-No.: 203-450-8 EC Index-No.: 601-013-00-X REACH-no: 01-2119471988-16	≤ 43
2-methylpropene	CAS-No.: 115-11-7 EC-No.: 204-066-3 EC Index-No.: 601-012-00-4	≤ 27
but-1-ene	CAS-No.: 106-98-9 EC-No.: 203-449-2 EC Index-No.: 601-012-00-4	≤ 12
SN / 203-448-7 / Butane	CAS-No.: 106-97-8 EC-No.: 203-448-7 EC Index-No.: 601-004-00-0 REACH-no: 01-2119474691-32-0027	≤ 5
Butene cis	CAS-No.: 590-18-1 EC-No.: 209-673-7 EC Index-No.: 601-012-00-4	≤ 4
SN / 200-857-2 / isobutane	CAS-No.: 75-28-5 EC-No.: 200-857-2 EC Index-No.: 601-004-00-0 REACH-no: 01-2119485395-27-0020	≤ 3
TVK / 200-816-9 / Acetylene	CAS-No.: 74-86-2 EC-No.: 200-816-9	≤ 0.8

### 3.2. Mixtures

Not applicable

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### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general	: Extremely flammable liquefied gas. An asphyxiant at high concentrations, oxygen depletion can be fatal. Contact with product in liquid form may cause frostbite. Before attempting to rescue casualties, isolate area from all potential sources of ignition including disconnecting electrical supply. Ensure adequate ventilation and check that a safe, breathable atmosphere is present before entry into confined spaces. Take care to self-protect by avoiding becoming contaminated. Use approved positive pressure air supplied breathing apparatus with a full facepiece. Move contaminated patient(s) out of the dangerous area. Seek medical assistance - show the material safety data sheet or label if possible.
First-aid measures after inhalation	: Remove casualty to fresh air as quickly as possible. Do not leave the victim unattended. Keep warm and at rest. Place in the recovery position. Seek immediate medical attention. If breathing is difficult, give oxygen if possible, or assisted ventilation. In the event of cardiac arrest, (no pulse), apply cardiopulmonary resuscitation.
First-aid measures after skin contact	: Do not remove clothing that adheres due to freezing. Immediately flush affected area with plenty of water. continue for at least 15 minutes. If there are signs of frostbite, (blanching or redness of skin or burning or tingling sensation), do not rub, massage or compress the affected area. Send the casualty immediately to hospital.
First-aid measures after eye contact	: Remove contact lenses, if present and easy to do so. Irrigate eyes with copious amounts of water for at least 10-15 min, holding eyelids apart to ensure thorough rinsing. If there are signs of frostbite, pain, swelling, lachrimation or photophobia persists, or in case of damage from high pressure jets, the patient should be seen in a specialist health care facility.
First-aid measures after ingestion	: Not considered a likely route of exposure – frostbite to the lips and mouth may occur if in contact with the liquid.

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

Symptoms/effects after inhalation	: Exposure to high concentrations may cause asphyxiation as a consequence of oxygen deficiency.
Symptoms/effects after skin contact	: Contact with the liquefied gas may cause frostbite.
Symptoms/effects after eye contact	: Contact with product in liquid form may cause frostbite.

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

A simple asphyxiant gas at normal temperatures and pressures. There is no specific antidote. In the event of contact with product in liquid form treat for frostbite.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media	: Water fog (trained personnel only). Dry chemical powder. Carbon dioxide. Foam (trained personnel only). Sand or earth.
Unsuitable extinguishing media	: Do not use direct water jets on the burning product. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

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

Fire hazard	: extremely flammable gas. Fire/heat: explosive hazard bigger than fire hazard.
Explosion hazard	: They may be ignited by heat, sparks, static electricity or flames.

#### 5.3. Advice for firefighters

Firefighting instructions	: Though other forms of extinguishing agent may be used, they are considered less effective for deep seated and smouldering fires.
Protection during firefighting	: In case of a large fire or in confined or poorly ventilated spaces, wear full fire resistant protective clothing and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Other information	: Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide. Respiratory problems or nausea by excessive exposure to hot product fumes.

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### SECTION 6: Accidental release measures

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

General measures : Do not handle until all safety precautions have been read and understood.

##### 6.1.1. For non-emergency personnel

Protective equipment : a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure.

Emergency procedures : Spillages of product generate large volumes of extremely flammable gas which is heavier than air and will accumulate in low areas. When the presence of dangerous amounts of H<sub>2</sub>S around the spilled product is suspected or proved, additional or special actions may be warranted, including access restrictions, use of special protection equipment, procedures and personnel training. Stop or contain leak at the source, if safe to do so. Avoid direct contact with released material. Stay upwind. Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Enter area only if strictly necessary. A combustible gas detector can be used to check for flammable gas or vapors. Eliminate all ignition sources if safe to do so (e.g. electricity, sparks, fires, flares). If required, notify relevant authorities according to all applicable regulations.

##### 6.1.2. For emergency responders

Emergency procedures : recommended measures are based on the most likely spillage scenarios for this material.

#### 6.2. Environmental precautions

Stop leak if safe to do so. Spillages of product generate large volumes of extremely flammable gas which is heavier than air and will accumulate in low areas. Ensure adequate ventilation of confined spaces, especially underground ones. Spillages of liquid product in the water will likely result in a quick and complete vaporization of the product. Isolate the area and prevent fire/explosion hazard for ships and other structures, taking into account wind direction and speed, until the product is completely dispersed. prevent product from entering sewers, rivers or other bodies of water.

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

Other information : Use only non-sparking tools.

#### 6.4. Reference to other sections

Contaminated material should be disposed of as hazardous waste according to chapter 13. See also item 8 (personal protective equipment) and 13 (disposal).

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Risk of explosive mixtures of vapour and air. A specific assessment of inhalation risks from the presence of H<sub>2</sub>S in tank headspaces, confined spaces, product residue, tank waste and waste water, and unintentional releases must be made to help determine controls appropriate to local circumstances. Consider technical advances and process upgrades (including automation) for the elimination of releases. Clean/flush equipment, where possible, prior to maintenance. Consider the need for risk based health surveillance. Regularly inspect, test and maintain all control measures. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid all sources of ignition, oxidising agents, chlorine and hydrogen chloride or hydrogen fluoride. Take precautionary measures against static electricity. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Handle empty containers with care; vapour residue may be flammable. Do not weld, solder, drill, cut or perform similar operations on or near containers. The vapour is heavier than air. Beware of accumulation in pits and confined spaces. Use piping and equipment designed to withstand the pressures to be encountered. Use a check valve or other protective device to prevent reverse flow. Ensure that all relevant regulations regarding handling and storage facilities of flammable products are followed. Dispose of rinse water in accordance with local and national regulations.

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

Technical measures	: Do not eat, drink or smoke when using this product. For maintenance work or conservation, emptied tanks should be purged, and blanketed with inert gas (i.e. nitrogen).
Storage conditions	: To stored only in supplied cylinders or approved vessels. Cylinders should be secured vertical - and only transported in a secure position in a well ventilated vehicle or hand truck. Cylinders which have been are opened must be carefully resealed and kept upright.
Storage area	: Store in a designated cool and well-ventilated place.
Special rules on packaging	: Protect from the sunlight.

### 7.3. Specific end use(s)

Site documentation to support safe handling arrangements including the selection of engineering, administrative and personal protective equipment controls in accordance with risk-based management systems is available at each manufacturing site. Handle in accordance with good industrial practices.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

SN / 203-448-7 / Butane (106-97-8)	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
IOEL TWA	5 mg/m <sup>3</sup> 1,3 butadiene
IOEL TWA [ppm]	11 ppm 1,3 butadiene
IOEL STEL	20 mg/m <sup>3</sup> 1,3 butadiene
IOEL STEL [ppm]	44 ppm 1,3 butadiene
<b>Austria - Occupational Exposure Limits</b>	
MAK (OEL TWA)	11 mg/m <sup>3</sup> 1,3 -butabutadiene
MAK (OEL TWA) [ppm]	5 ppm 1,3 -butabutadiene
MAK (OEL STEL)	44 mg/m <sup>3</sup> 1,3 -butabutadiene
MAK (OEL STEL) [ppm]	20 ppm 1,3 -butabutadiene

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

##### Appropriate engineering controls:

Do not enter empty storage tanks until measurements of available oxygen have been carried out. Ensure control measures are regularly inspected and maintained.

#### 8.2.2. Personal protection equipment

##### Personal protective equipment:

Protective goggles. Gloves. Protective clothing.

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### Personal protective equipment symbol(s):



#### 8.2.2.1. Eye and face protection

##### Eye protection:

Safety glasses

#### 8.2.2.2. Skin protection

##### Skin and body protection:

normal antistatic working clothes are usually adequate

##### Hand protection:

Wear chemically resistant gloves (tested to EN374) in combination with specific activity training.

##### Other skin protection

##### Materials for protective clothing:

Protective clothing. Clothing to protect against heat and flame (EN 11612)

#### 8.2.2.3. Respiratory protection

##### Respiratory protection:

Self-contained closed-circuit breathing apparatus compressed oxygen or compressed oxygen-nitrogen type (EN 145).

#### 8.2.2.4. Thermal hazards

##### Thermal hazard protection:

None in normal conditions.

#### 8.2.3. Environmental exposure controls

##### Environmental exposure controls:

Store finished products in closed containers (e.g. bulk tanks, drums, cans). Use vapour recovery units when necessary. Store all VOC-containing wastes in closed, secure containers (e.g. bulk tanks, intermediate bulk containers, drums).

##### Consumer exposure controls:

Site documentation to support safe handling arrangements including the selection of engineering, administrative and personal protective equipment controls in accordance with risk-based management systems is available at each manufacturing site.

##### Other information:

Do not eat, drink or smoke when using this product.

## SECTION 9: Physical and chemical properties

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

Physical state	: Gas
Appearance	: Liquid under pressure.
Colour	: Colourless.
Odour	: characteristic odour.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: -108.9 °C
Boiling point	: -4.47 °C
Flash point	: -85 °C
Auto-ignition temperature	: 415 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20°C	: 2.435
Relative density	: No data available

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Density	: 0.59 kg/m <sup>3</sup>
Solubility	: Water: 39 g/100cm <sup>3</sup>
Partition coefficient n-octanol/water (Log Pow)	: No data available
Partition coefficient n-octanol/water (Log Kow)	: 1.09 – 2.8
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Lower explosive limit (LEL)	: 1.1 vol %
Upper explosive limit (UEL)	: 10 vol %

### 9.2. Other information

Minimum ignition energy	: 0.125 mJ
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

This substance is stable under all ordinary circumstances at ambient temperatures, and if released into the environment.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Contact with strong oxidizers (peroxides, chromates, etc.) may cause a fire hazard.

### 10.4. Conditions to avoid

They may be ignited by heat, sparks, static electricity or flames.

### 10.5. Incompatible materials

A mixture with nitrates or other strong oxidisers (e.g. chlorates, perchlorates, liquid oxygen) may create an explosive mass.

### 10.6. Hazardous decomposition products

Combustion (incomplete) will likely generate oxides of carbon, sulphur and nitrogen, as well as additional undetermined organic compounds of the same elements. No decomposition if stored normally.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

#### SN / 203-448-7 / Butane (106-97-8)

LC50 Inhalation - Rat	658 mg/l
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#### SN / 200-857-2 / isobutane (75-28-5)

LC50 Inhalation - Rat	1237 mg/l
LC50 Inhalation - Rat [ppm]	520400 ppm

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: May cause genetic defects.
Carcinogenicity	: May cause cancer by inhalation.
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified



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STOT-repeated exposure : Not classified  
Aspiration hazard : Not classified

### SECTION 12: Ecological information

#### 12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified  
Hazardous to the aquatic environment, long-term (chronic) : Not classified

C4 Fraction (68476-52-8)	
LC50 - Fish [1]	24.11 – 147.54 mg/l
SN / 203-448-7 / Butane (106-97-8)	
LC50 - Fish [1]	24.11 mg/l
LC50 - Other aquatic organisms [1]	7.71 mg/l
EC50 - Crustacea [1]	14.22 mg/l
SN / 200-857-2 / isobutane (75-28-5)	
LC50 - Fish [1]	27.98 mg/l (Q)SAR
EC50 - Crustacea [1]	16.33 mg/l (Q)SAR
EC50 - Other aquatic organisms [1]	8.57 mg/l (Q)SAR

#### 12.2. Persistence and degradability

SN / 203-448-7 / Butane (106-97-8)	
Persistence and degradability	Easily biodegradable (concerning to the criteria of the OECD).
SN / 200-857-2 / isobutane (75-28-5)	
Persistence and degradability	Product is biodegradable.

#### 12.3. Bioaccumulative potential

C4 Fraction (68476-52-8)	
Partition coefficient n-octanol/water (Log Kow)	1.09 – 2.8
Bioaccumulative potential	Based on the n-octanol/water partition coefficient significant accumulation in organisms is not expected.
SN / 203-448-7 / Butane (106-97-8)	
Partition coefficient n-octanol/water (Log Pow)	≤ 2.8
Bioaccumulative potential	Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.
SN / 200-857-2 / isobutane (75-28-5)	
Partition coefficient n-octanol/water (Log Kow)	1.09 – 2.8
Bioaccumulative potential	Does not accumulate in organisms.

#### 12.4. Mobility in soil

No additional information available

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### 12.5. Results of PBT and vPvB assessment

Component	
SN / 203-448-7 / Butane (106-97-8)	Butane is not considered PBT or vPvB
SN / 200-857-2 / isobutane (75-28-5)	Isobutane is not considered PBT or vPvB

### 12.6. Other adverse effects

No additional information available




## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste)	: DIRECTIVE 2008/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 November 2008 on waste and repealing certain Directives.
Sewage disposal recommendations	: Not applicable as there is no release to wastewater. Soil emission controls are not applicable as there is no direct release to soil.
Waste disposal recommendations	: Clear up spills immediately and dispose of waste safely. Wastewater emission controls are not applicable as there is no direct release to wastewater. Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	:

## SECTION 14: Transport information

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

ADR	RID	ADN	IMDG	IATA
<b>14.1. UN number</b>				
1010	1010	1010	1010	1010
<b>14.2. UN proper shipping name</b>				
BUTADIENES AND HYDROCARBON MIXTURE, STABILIZED	BUTADIENES AND HYDROCARBON MIXTURE, STABILIZED	BUTADIENES AND HYDROCARBON MIXTURE, STABILIZED	BUTADIENES AND HYDROCARBON MIXTURE, STABILIZED	Butadienes and hydrocarbon mixture, stabilized
<b>14.3. Transport hazard class(es)</b>				
2.1 	2.1 	2.1	2.1	2.1 
<b>14.4. Packing group</b>				
Not applicable			Not applicable	
<b>14.5. Environmental hazards</b>				
Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No
<b>14.6. Special precautions for user</b>				
239  Special provisions (ADR): 368, 618, 662	239  Special provisions (RID): 386, 618, 662		EmS-No. (Fire) F-D EmS-No. (Spillage) S-U	

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ADR	RID	ADN	IMDG	IATA
2F	2F	2F		
No supplementary information available				

### SECTION 15: Regulatory information

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

##### 15.1.1. EU-Regulations

Not listed on REACH Annex XVII

Not listed on the REACH Candidate List

Not listed on REACH Annex XIV (Authorisation List)

Not listed on the PIC list (Regulation EU 649/2012)

Not listed on the POP list (Regulation EU 2019/1021)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

##### 15.1.2. National regulations

France	
Occupational diseases	
Code	Description
RG 99	Hemic diseases caused by 1,3-butadiene and all products containing it

##### Germany

Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV; ID No. 8447)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

##### Netherlands

SZW-lijst van kankerverwekkende stoffen : SPC /270-691-3/ Hydrocarbons C4, ethylene – manufactured by product is listed

SZW-lijst van mutagene stoffen : SPC /270-691-3/ Hydrocarbons C4, ethylene – manufactured by product is listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : The substance is not listed

SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

##### Denmark

Class for fire hazard : Class I-1

Store unit : 1 liter

Classification remarks : F+ <Flam. Gas 1A; Press. Gas (Comp.)>; Emergency management guidelines for the storage of flammable liquids must be followed

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product  
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

##### Switzerland

Storage class (LK) : LK 2 - Liquefied or pressurized gases

#### 15.2. Chemical safety assessment

No additional information available

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### SECTION 16: Other information

Data sources : LOA registration dossier.  
Training advice : Before handling, storing or using the present substance for the first time, employees must be informed.

Full text of H- and EUH-statements:	
Carc. 1A	Carcinogenicity (inhalation) Category 1A
Flam. Gas 1A	Flammable gases, Category 1A
H220	Extremely flammable gas.
H280	Contains gas under pressure; may explode if heated.
H340	May cause genetic defects.
H350i	May cause cancer by inhalation.
Muta. 1B	Germ cell mutagenicity, Category 1B
Press. Gas (Comp.)	Gases under pressure : Compressed gas

SDS EU (REACH Annex II) MOL

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.