## Butan/propan Universal gas

Revision date: 21/11/2022 Version: 1.0.0

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

Trade name:	Butan/propan Universal gas		
1.2. Relevant identified u	uses of the substance or mixture and uses advised against		
Recommended uses:	Universal gas		
1.3. Details of the suppli	er of the safety data sheet		
Supplier			
Company:	Fritz Schur Consumer Products A/S		
Address:	Esplanaden 40		
Zip code:	DK-1263		
City:	København K		
Country:	DENMARK		
E-mail:	info@fscp.dk		
Phone:	+45 33 96 00 60		

Members of the public: 111 (NHS 111 (Scotland: NHS 24)).

### **SECTION 2: Hazards identification**

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

CLP-classification: Flam. Gas 1A;H220 Press. Gas Comp. gas;H280

**Most serious harmful effects:** Extremely flammable gas. Contains gas under pressure, may explode if heated. The product releases vapours which may cause lethargy and dizziness. At high concentrations, the vapours may cause headache and intoxication. Direct contact may cause frostbite. The skin becomes numb and white. Pains, reddening and wounds follow.

# Butan/propan Universal gas

Revision date: 21/11/2022 Version: 1.0.0

#### 2.2. Label elements

**Pictograms** 

Signal word:	Danger
Contains	
Substance:	Hydrocarbons, C3-4-rich, petroleum distillate, Petroleum gas,[A complex combination of hydrocarbons produced by distillation and condensation of crude oil. It consists of hydrocarbons having carbon numbers in the range of C3 through C5, predominantly C3 through C4.];
Hazard Statements	
H220	Extremely flammable gas.
H280	Contains gas under pressure, may explode if heated.
Precautionary statements	
P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P377	Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
P381	In case of leakage, eliminate all ignition sources.
P410+403	Protect from sunlight. Store in a well-ventilated place.
P412	Do not expose to temperatures exceeding 50°C/122°F.

#### 2.3. Other hazards

The product does not contain any PBT or vPvB substances. Endocrine disrupting properties: None known.

## **SECTION 3: Composition/information on ingredients**

## 3.2. Mixtures

3.2. WIXtures				
Substance	CAS No./ EC No./ REACH Reg. No.	Concentration	Notes	CLP-classification
Hydrocarbons, C3-4- rich, petroleum distillate, Petroleum gas,[A complex combination of hydrocarbons produced by distillation and condensation of crude oil. It consists of hydrocarbons having carbon numbers in the range of C3 through C5, predominantly C3 through C4.]	68512-91-4 270-990-9 01-2119485926-20	> 99 %		Flam. Gas 1A;H220 Press. Gas Comp. gas;H280
ethanethiol	75-08-1 200-837-3 01-2119491286-30	< 0.1 %		Flam. Liq. 1;H224 Skin Sens. 18;H317 Acute Tox. 4;H332 Aquatic Acute 1;H400 Aquatic Chronic 1;H410 M (acute): 10 M (chronic): 10

Please see section 16 for the full text of H- / EUH-phrases.

## Butan/propan Universal gas

Revision date: 21/11/2022 Version: 1.0.0

## **SECTION 4: First aid measures**

4.1. Description of fire	st aid measures
Inhalation:	Seek fresh air. Seek medical advice in case of persistent discomfort.
Ingestion:	Not relevant, as the product is a gas.
Skin contact:	Remove contaminated clothing. Wash skin with soap and water. Seek medical advice immediately if symptoms indicate that the gas has been absorbed through the skin. On frostbite: rinse with plenty of lukewarm water (max 37°C). Do not remove clothes until thawed. Seek medical advice. Seek medical advice in case of persistent discomfort.
Eye contact:	Flush immediately with water (preferably using eye wash equipment) for at least 5 minutes. Open eye wide. Remove any contact lenses. Seek medical advice in case of frostbite.
Burns:	Flush with water until pain ceases. Remove clothing that is not stuck to the skin - seek medical advice/transport to hospital. If possible, continue flushing until medical attention is obtained.
General:	When obtaining medical advice, show the safety data sheet or label.

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

Direct contact may cause frostbite. The skin becomes numb and white. Pains, reddening and wounds follow. The product releases vapours which may cause lethargy and dizziness. At high concentrations, the vapours may cause headache and intoxication.

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

Treat symptoms. No special immediate treatment required.

#### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media:	Extinguish with powder, foam, carbon dioxide or water mist. Use water or water mist to cool non-ignited stock.
Unsuitable extinguishing media:	Do not use water stream, as it may spread the fire.

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

The product decomposes when combusted and the following toxic gases can be formed: Carbon monoxide and carbon dioxide. Heating will cause a rise in pressure in packaging with a risk of bursting. Explosive mixtures may form with air when heated/exposed to fire.

#### 5.3. Advice for firefighters

Move containers from danger area if it can be done without risk. Avoid inhalation of vapour and flue gases - seek fresh air. Wear Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely.

#### **SECTION 6: Accidental release measures**

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

For non-emergency personnel: Stay upwind/keep distance from source. Provide adequate ventilation. Smoking and naked flames prohibited. Wear safety goggles if there is a risk of eye splash. Wear gloves.

For emergency responders: In addition to the above: Normal protective clothing equivalent to EN 469 is recommended.

## Butan/propan Universal gas

Revision date: 21/11/2022 Version: 1.0.0

#### 6.2. Environmental precautions

Avoid unnecessary release to the environment.

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

Not applicable.

#### 6.4. Reference to other sections

See section 8 for type of protective equipment. See section 13 for instructions on disposal.

#### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Use the product under well-ventilated conditions. Smoking and naked flames prohibited. Wash hands before breaks, before using restroom facilities, and at the end of work. Running water and eye wash equipment must be available. Seek medical advice immediately if symptoms indicate that the gas has been absorbed through the skin. On frostbite: rinse with plenty of lukewarm water (max 37°C). Do not remove clothes until thawed. Seek medical advice.

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

Keep in tightly closed original packaging. Storage temperature: 5-30 °C. Store safely, out of reach of children and away from food, animal feeding stuffs, medicines, etc. Pressurized container: Protect from sunlight and do not expose to temperatures exceeding 50°C. Do not store with the following: Oxidisers/ Halogenated compounds.

#### 7.3. Specific end use(s)

None.

#### **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

#### **Occupational exposure limit**

Substance name	Time period	ppm	mg/m³	fiber/cm3	Remarks	Comments
ethanethiol	8h	0.5	1.3			
ethanethiol	15m	2	5.2			

Measuring methods: Compliance with the stated occupational exposure limits may be checked by occupational hygiene measurements.

Legal basis:

EH40/2005 Workplace exposure limits. Last amended January 2020.

#### PNEC

ethanethiol, cas-no 75-08-1				
Exposure	Value	Assessment Factor	Extrapolation Method	Note
PNEC aqua (freshwater)	100 mg/l			
PNEC aqua (intermittent releases (fresh water))	1 mg/l			
PNEC aqua (marine water)	10 mg/l			
PNEC STP (wastewater- treatment facilities)	8,81 mg/l			
PNEC sediment (freshwater)	490 mg/kg			
PNEC sediment (marine water)	49 mg/kg			

# Butan/propan Universal gas

Revision date: 21/11/2022 Versior

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## DNFL - workers

40,9 mg/kg dw

PNEC soil

DIVLL - WOIKEIS	JNEL - WOIKEIS				
and condensation of	•	ate, Petroleum gas,[A of hydrocarbons having 512-91-4	•		
Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact	Note
Dermal DNEL (long- term exposure - systemic effects)	23,4 mg/kg				
Inhalation DNEL (long-term exposure - systemic effects)	2,21 mg/m³				
ethanethiol, cas-no 7	/5-08-1	· · · ·			
Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Dermal DNEL (long- term exposure - systemic effects)	1,6 mg/kg bw/day				
Inhalation DNEL (long-term exposure - systemic effects)	11				

#### **DNEL** - general population

Hydrocarbons, C3-4-rich, petroleum distillate, Petroleum gas, [A complex combination of hydrocarbons produced by distillation and condensation of crude oil. It consists of hydrocarbons having carbon numbers in the range of C3 through C5, predominantly C3 through C4.], cas-no 68512-91-4

Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact	Note
Inhalation DNEL (long-term exposure - systemic effects)	0,0664 mg/m³				
ethanethiol, cas-no 7	5-08-1				
Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Inhalation DNEL (long-term exposure - systemic effects)	1,96 mg/m³				
Oral DNEL (long- term exposure - systemic effects)	800 mg/kg bw/day				

#### 8.2. Exposure controls

Appropriate engineering controls:	Wear the personal protective equipment specified below.
Personal protective equipment, eye/face protection:	Wear safety goggles if there is a risk of eye splash. Eye protection must conform to EN 166.
Personal protective equipment, hand protection:	Wear gloves. Gloves must conform to EN 374. Penetration time: > 480 min. Nitrile rubber/ PVC. The suitability and durability of a glove is dependant on usage, e.g. frequency and duration of contact, glove material thickness, functionality and chemical resistance. Always seek advice from the glove supplier.
Personal protective equipment, respiratory protection:	Use process ventilation. If this is not possible, use respiratory equipment. Filter type: A.
Environmental exposure controls:	Ensure compliance with local regulations for emissions.

# Butan/propan Universal gas

Revision date: 21/11/2022 Version: 1.0.0

## **SECTION 9: Physical and chemical properties**

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

Parameter		Value/unit		
State	Gas	Gas		
Colour	Colourless	Colourless		
Odour	Unpleasant			
Solubility	24.4 - 60.4 g/l @ 20 °C	Water.		
Parameter	Value/unit	Remarks		
Odour threshold	No data			
Melting point	-187.6138.3 °C			
Freezing point	No data			
Initial boiling point and boiling range	-161.40.5 °C			
Flammability (solid, gas)	No data			
Flammability limits	No data			
Explosion limits	1.8 - 15 vol%			
Flash Point	-10460 °C			
Auto-ignition temperature	287 - 537 °C			
Decomposition temperature	No data			
pH (solution for use)	No data			
pH (concentrate)	No data			
Kinematic viscosity	No data			
Viscosity	No data			
Partition coefficient n-octonol/water	1.09 - 2.8 g/l	(log Pow)		
Vapour pressure	530 - 1550 kPa	(40 °C)		
Density	0.4228 - 0.589 g/cm <sup>3</sup>	(20 °C)		
Relative density	No data			
Vapour density	No data			
Relative density (sat. air)	No data			
Particle characteristics	No data			

#### 9.2. Other information

Parameter	Value/unit	Remarks
Explosive properties		Non-explosive
Oxidising properties		Non-oxidising.

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Oxidisers/ Halogenated compounds.

#### 10.2. Chemical stability

The product is stable when used in accordance with the supplier's directions.

#### 10.3. Possibility of hazardous reactions

Product vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

#### 10.4. Conditions to avoid

Avoid heating and contact with ignition sources.

#### 10.5. Incompatible materials

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## Butan/propan Universal gas

Revision date: 21/11/2022 Version: 1.0.0

Oxidisers/ Halogenated compounds.

#### 10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide.

### **SECTION 11: Toxicological information**

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

#### Acute toxicity - oral

#### ethanethiol, cas-no 75-08-1

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		682 mg/kg			

By normal handling, gases cannot be ingested. The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.

#### Acute toxicity - dermal

#### ethanethiol, cas-no 75-08-1

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rabbit	LD50		> 2000 mg/kg bw			

The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.

### Acute toxicity - inhalation

#### ethanethiol, cas-no 75-08-1

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LC50 (vapour)	4h	11.23 mg/l			

The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.

Skin corrosion/irritation:	Direct contact may cause frostbite. The skin becomes numb and white. Pains, reddening and wounds follow. The product does not have to be classified. Test data are not available.
Serious eye damage/eye irritation:	Splashes of gas in the eyes may cause frostbite. The product does not have to be classified. Test data are not available.
Respiratory sensitisation or skin sensitisation:	The product does not have to be classified. Test data are not available.
Germ cell mutagenicity:	The product does not have to be classified. Test data are not available.
Carcinogenic properties:	The product does not have to be classified. Test data are not available.
Reproductive toxicity:	The product does not have to be classified. Test data are not available.
Single STOT exposure:	The gas may displace atmospheric air, thereby causing risk of suffocation. The product releases organic solvent vapours which may cause lethargy and dizziness. At high concentrations, the vapours may cause headache and intoxication. The product does not have to be classified. Test data are not available.
Repeated STOT exposure:	The product does not have to be classified. Test data are not available.
Aspiration hazard:	The product does not have to be classified. Test data are not available.
11.2. Information on other h	azards
Endocrine disrupting	None known.

## Butan/propan Universal gas

Revision date: 21/11/2022 Version: 1.0.0

properties:

Other toxicological effects: None known.

### **SECTION 12: Ecological information**

#### 12.1. Toxicity

#### ethanethiol, cas-no 75-08-1

, -							
Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
Algae			48hEC50	0.1 mg/l			
Algae			72hEC50	3 mg/l			
Fish			96hLC50	2.4 mg/l			

The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.

#### 12.2. Persistence and degradability

Test data are not available.

#### 12.3. Bioaccumulative potential

ethanethiol, cas-no 75-08-1							
Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
			Log Kow	< 3			

The product contains at least one substance with low bioaccumulative potential.

#### 12.4. Mobility in soil

Test data are not available.

#### 12.5. Results of PBT and vPvB assessment

The product does not contain any PBT or vPvB substances.

#### 12.6. Endocrine disrupting properties

None known.

#### 12.7. Other adverse effects

None known.

#### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Avoid unnecessary release to the environment. Do not dispose of aerosol sprays in refuse collection, even when empty. The sprays must be sent to the municipal chemical waste collection facility. If this product as supplied becomes a waste, it meets the criteria of a hazardous waste (Dir. 2008/98/EU). Collect spills and waste in closed, leak-proof containers for disposal at the local hazardous waste site. Empty, cleansed packaging should be disposed of for recycling. Uncleansed packaging is to be disposed of via the local waste-removal scheme.

#### Category of waste:

EWC code: Depends on line of business and use, for instance 16 05 04\* gases in pressure containers (including halons) containing hazardous substances Absorbent/cloth contaminated with the product: EWC code: 15 02 02\* absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by hazardous substances

#### **SECTION 14: Transport information**

# Butan/propan Universal gas

Revision date: 21/11/2022 Version: 1.0.0

Land transport (ADR/RID)			
14.1. UN number or ID number: 14.2. UN proper shipping name:	2037	14.4. Packing group: 14.5. Environmental hazards:	- The product should not be labelled as an environmental hazard (symbol: fish and tree).
14.3. Transport hazard class(es):	2.1		
Hazard label(s): Hazard identification number:		Turnel restriction and a	D
		Tunnel restriction code:	D
Inland water ways transport	· ·		
14.1. UN number or ID number:	2037	14.4. Packing group:	
14.2. UN proper shipping name:	RECEPTACLES, SMALL, CONTAINING GAS without a release device, non-refillable	14.5. Environmental hazards:	The product should not be labelled as an environmental hazard (symbol: fish and tree).
14.3. Transport hazard class(es): Hazard label(s):	2.1		
Transport in tank vessels:	Not applicable.		
Sea transport (IMDG)			
14.1. UN number or ID number:		14.4. Packing group:	-
14.2. UN proper shipping name:	RECEPTACLES, SMALL, CONTAINING GAS without a release device, non-refillable	14.5. Environmental hazards:	The product is not a Marine Pollutant (MP).
14.3. Transport hazard class(es): Hazard label(s):	2.1	Environmental Hazardous Substance Name(s):	
EmS:		IMDG Code segregation group:	
Air transport (ICAO-TI / IATA	-DGR)		
14.1. UN number or ID number:	2037	14.4. Packing group:	
14.2. UN proper shipping name:	RECEPTACLES, SMALL, CONTAINING GAS without a release device, non-refillable	14.5. Environmental hazards:	The product should not be labelled as an environmental hazard (symbol: fish and tree).
14.3. Transport hazard class(es):	2.1		
Hazard label(s):			
14.6. Special precautions for	user		
None.			
14.7. Maritime transport in b	ulk according to IMO instru	iments	
Not applicable.			
<b>SECTION 15: Regulatory i</b>	nformation		

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

	Special care should be applied for employees under the age of 18. Young people under age of 18 may not carry out any work causing harmful exposure to this product. Directive 2012/18/EU (Seveso), P2 FLAMMABLE GASES: Column 2: 10 t, Column 3: 4 Covered by: Council Directive (EC) on the protection of young people at work. Council Directive (EC) on the introduction of measures to encourage improvements in the	50 t.
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# Butan/propan Universal gas

Revision date: 21/11/2022 Version: 1.0.0

safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding.

#### 15.2. Chemical Safety Assessment

REACH Reg. No.	Substance name
01-2119485926-20	Hydrocarbons, C3-4-rich, petroleum distillate, Petroleum gas, [A complex combination of hydrocarbons produced by distillation and condensation of crude oil. It consists of hydrocarbons having carbon numbers in the range of C3 through C5, predominantly C3 through C4.]
01-2119491286-30	ethanethiol

## **SECTION 16: Other information**

### Version history and indication of changes

Version	Revision date	Responsible	Changes			
1.0.0	21/11/2022	Bureau Veritas HSE/SUJ				
Abbreviations:	PBT: Persistent, Bioaccumulative and Toxic vPvB: Very Persistent and Very Bioaccumulative STOT: Specific Target Organ Toxicity DNEL: Derived No Effect Level PNEC: Predicted No Effect Concentration					
Other Information:	This safety data sheet has been prepared for and applies to this product only. It is based on our current knowledge and the information that the supplier was able to provide about the product at the time of preparation. The safety data sheet complies with applicable law on preparation of safety data sheets in accordance with Regulation 1907/2006/EC "The Registration, Evaluation and Authorization of Chemicals" as amended by the stationary UK REACH etc. (EU Exit) as subsequently changed.					
Training advice:	A thorough knowledge of this	s safety data sheet should be a p	prerequisite condition.			
Classification method:	Calculation based on the haz	zards of the known components.				
List of relevant H-statemer	nts					
H220	Extremely flammable gas.					
H224	Extremely flammable liquid a	nd vapour.				
H280	Contains gas under pressure	, may explode if heated.				
H317	May cause an allergic skin re	eaction.				
H332	Harmful if inhaled.					
H400	Very toxic to aquatic life.					
H410	Very toxic to aquatic life with	long lasting effects.				
Country:	GB					