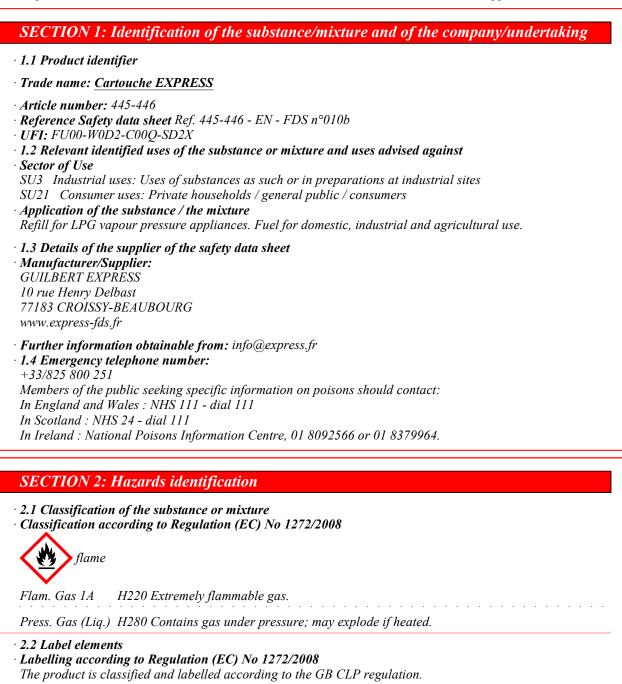


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Hazard pictograms



· Signal word Danger

• Hazard statements

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

- 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.

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P410+P403 Protect from sunlight. Store in a well-ventilated place.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

• **PBT:** Not applicable.

• **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
CAS: 106-97-8	butane, pure	25-50%
	🛞 Flam. Gas 1A, H220; Press. Gas (Comp.), H280	
Reg.nr.: 01-2119474691-32-XXXX	•	
CAS: 115-07-1	propene	25-50%
EINECS: 204-062-1	🚸 Flam. Gas 1A, H220; Press. Gas (Comp.), H280	
Reg.nr.: 01-2119447103-50-XXXX	•	

· Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

• 4.1 Description of first aid measures

· After inhalation: Supply fresh air; consult doctor in case of complaints.

- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents:
- CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- For safety reasons unsuitable extinguishing agents: Water with full jet
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
- Protective equipment:

Wear self-contained respiratory protective device. Mouth respiratory protective device.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.
- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up: Ensure adequate ventilation.
- 6.4 Reference to other sections
 See Section 7 for information on safe handling.
 See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

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SECTION 7: Handling and storage

- · 7.1 Precautions for safe handling Keep away from heat and direct sunlight.
- Information about fire and explosion protection: Keep ignition sources away Do not smoke.
- 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep container tightly sealed.
- Recommended storage temperature: Storage temperature : Room temperature
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:
- The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see section 7.
- · Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures: Wash hands before breaks and at the end of work.
- **Respiratory protection:** Use suitable respiratory protective device in case of insufficient ventilation.
- · Hand protection

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- · Material of gloves
- Not applicable

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. (Refer to standard EN-374).

- Penetration time of glove material
- Not applicable

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Gaseous

Colourless

• *Eye/face protection* Not required.

• **Body protection:** Protective workwear (EN-1149)

SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information
- · Physical state
- · Colour:

range

- · Odour:
- Characteristic · Boiling point or initial boiling point and boiling Undetermined.

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Flammability	Not determined.
Lower and upper explosion limit	
Lower:	0.6 Vol %
Upper:	12 Vol %
Flash point:	-70 °C
Auto-ignition temperature:	455 °C
Decomposition temperature:	Not determined.
рН	Not determined.
Solubility	
water:	Partly miscible.
Vapour pressure at 20 °C:	10.5 hPa
Density and/or relative density	
Density at 20 °C:	$0.56 g/cm^3$
9.2 Other information	No further relevant information available.
Appearance:	0 0
Form:	Compressed liquefied gas
Important information on protection of health	
environment, and on safety.	
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product is not explosive. However, formation of
Explosive properties.	explosive air/vapour mixtures are possible.
Solvent content:	explosive allyvapour mixiales are possible.
Organic solvents:	0.0 %
VOC (EC)	0.00%
Information with regard to physical hazard c	
Explosives	Void
Flammable gases	Extremely flammable gas.
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Contains gas under pressure; may explode if heated.
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flamme	
gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant information available.

· 10.2 Chemical stability

• Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid Avoid temperatures above 50°C
- · 10.5 Incompatible materials:

Strong acids

Alkali metals

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· 10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

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SECTION 11: Toxicological information

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

· Acute toxicity Based on available data, the classification criteria are not met.

- Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or 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.
- \cdot Carcinogenicity Based on available data, the classification criteria are not met.
- $\cdot \textit{Reproductive toxicity Based on available data, the classification criteria are not met.}$
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.
- · 11.2 Information on other hazards

• Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

- · 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- 12.5 Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Endocrine disrupting properties
- The product does not contain substances with endocrine disrupting properties.
- · 12.7 Other adverse effects
- Additional ecological information:
- · General notes:

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground.

SECTION 13: Disposal considerations

• 13.1 Waste treatment methods

· Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- Uncleaned packaging:
- *Recommendation: Disposal must be made according to official regulations.*

SECTION 14: Transport information

• 14.1 UN number or ID number • ADR, IMDG, IATA

UN2037

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SECTION 15: Regulatory information

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture · Poisons Act

· Regulated explosives precursors

- None of the ingredients is listed.
- · Regulated poisons

None of the ingredients is listed.

· Reportable explosives precursors

None of the ingredients is listed.

· Reportable poisons

None of the ingredients is listed.

· Directive 2012/18/EU

· Named dangerous substances - ANNEX I None of the ingredients is listed.

• Seveso category P2 FLAMMABLE GASES

• Qualifying quantity (tonnes) for the application of lower-tier requirements 10 t

• Qualifying quantity (tonnes) for the application of upper-tier requirements 50 t

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· National regulations:

• Waterhazard class: Water hazard class 3 (Self-assessment): extremely hazardous for water.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases H220 Extremely flammable gas. H280 Contains gas under pressure; may explode if heated. · Abbreviations and acronyms: RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ICAO: International Civil Aviation Organisation ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Flam. Gas 1A: Flammable gases - Category 1A Press. Gas (Comp.): Gases under pressure - Compressed gas Press. Gas (Liq.): Gases under pressure - Liquefied gas • * Data compared to the previous version altered.