

Trade name: Spare cartridge 110ml for GasBuddex

Version: 2 / DK

Date revised: 31.03.2025

Substance number:: 1756

Replaces Version: 1 / DK

Print date: 03.04.2025

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

### **1.1. Product identifier**

Spare cartridge 110ml for GasBuddex

#### **Registration no.**

UFI

USU4-X0T4-V003-D21M

#### **Substance / product identification**

PR-No.

1730, 1731, 1756, 1766

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

#### **Use of the substance/preparation**

Liquefied gas mixture

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

#### **Address/Manufacturer**

Albert Kerbl GmbH

Felizenzell 9

84428 Buchbach

Telephone no. +49 8086 933-100

Fax no. +49 8086 933-500

Information provided by / telephone Albert Kerbl GmbH Tel.: 0049-(0)8086-933-302

E-mail address of person responsible for this SDS sdb-team@kerbl.com

### **1.4. Emergency telephone number**

Joint poison information center for the states of Mecklenburg-Western Pomerania, Saxony, Saxony-Anhalt and Thuringia c/o HELIOS Klinikum Erfurt Nordhäuser Strasse 74

Tel.: (03 61) 73 07 30 - Fax: (03 61) 7 30 73 17

E-Mail: ggiz@ggiz-erfurt.de - Internet: www.ggiz-erfurt.de

Nødtelefon: +45 82 12 12 12 (Giftlinjen, Bispebjerg Hospital)

## **SECTION 2: Hazards identification**

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

#### **Classification (Regulation (EC) No. 1272/2008)**

Classification (Regulation (EC) No. 1272/2008)

Flam. Gas 1 H220

Press. Gas (Liq.) H280

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008

For explanation of abbreviations see section 16.

### **2.2. Label elements**

## Safety data sheet in accordance with regulation (EC) No 1907/2006

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## Labelling according to regulation (EC) No 1272/2008

### Hazard pictograms



### Signal word

Danger

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

### 2.3. Other hazards

The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms. The product contains no vPvB substances. The product contains no PBT substances. The product contains no PBT substances. The product contains no vPvB substances. This product does not contain a substance that has endocrine disrupting properties with respect to human. The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

## SECTION 3: Composition/information on ingredients

### Further ingredients

#### Butane

CAS No. 106-97-8  
EINECS no. 203-448-7  
Concentration >= 50 %  
Advice: [3]  
Classification (Regulation (EC) No. 1272/2008)  
Flam. Gas 1 H220  
Press. Gas (Liq.) H280

Additional remarks:

CLP Regulation (EC) No 1272/2008, Annex VI, Note C, U

#### Isobutane

CAS No. 75-28-5  
EINECS no. 200-857-2  
Concentration >= 10 < 25 %  
Advice: [3]  
Classification (Regulation (EC) No. 1272/2008)  
Flam. Gas 1 H220

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Press. Gas (Liq.) H280

Additional remarks:

CLP Regulation (EC) No 1272/2008, Annex VI, Note C, U

**propane**

CAS No. 74-98-6

EINECS no. 200-827-9

Concentration &gt;= 10 &lt; 25 %

Advice: [3]

Classification (Regulation (EC) No. 1272/2008)

Flam. Gas 1 H220

Press. Gas (Liq.) H280

Additional remarks:

CLP Regulation (EC) No 1272/2008, Annex VI, Note U

**Note**

[3] Substance with occupational exposure limits

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

Take affected person to fresh air.

**After inhalation**

In low concentrations may cause narcotic effects. Symptoms may include dizziness, headache, nausea and loss of co-ordination. In high concentrations may cause asphyxiation. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation. Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.

**After skin contact**

In case of frostbite, rinse with plenty of water. Do not remove clothing. Cover wounds with sterile dressing. Summon a doctor immediately.

**After eye contact**

Separate eyelids, wash the eyes thoroughly with water (15 min.). Seek medical advice immediately.

**After ingestion**

Ingestion is not considered a potential route of exposure.

**Adhere to personal protective measures when giving first aid**

First aider: Pay attention to self-protection!

**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****Hints for the physician / hazards**

No further relevant information available.

**SECTION 5: Firefighting measures**

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### 5.1. Extinguishing media

#### Suitable extinguishing media

Dry powder, Carbon dioxide, Sand

#### Non suitable extinguishing media

Full water jet

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

If a fire breaks out nearby, pressure build-up and danger of bursting are possible. In the event of fire the following can be released: Carbon monoxide (CO)

### 5.3. Advice for firefighters

#### Special protective equipment for fire-fighting

Do not inhale explosion and/or combustion gases. Use self-contained breathing apparatus. Wear protective clothing.

#### Other information

Cool endangered containers with water spray jet. If possible, stop flow of product. Do not extinguish a leaking gas flame unless absolutely necessary. Spontaneous/explosive reignition may occur.

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

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

Wear self-contained breathing apparatus when entering the area unless the atmosphere is proven to be non-hazardous. Clear area. Ensure adequate ventilation. Keep away sources of ignition. Refer to protective measures listed in Sections 7 and 8.

### 6.2. Environmental precautions

Try to stop the gas leakage. Prevent penetration into sewers, cellars, working pits or other places where accumulation can be dangerous.

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

Ensure sufficient ventilation. Keep area evacuated and free from ignition sources until all spillage has evaporated. (Ground is free of frost).

### 6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8.

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

### 7.1. Precautions for safe handling

#### Advice on safe handling

Reliably ground equipment. Only use equipment that is suitable for this product and the intended pressure and temperature. Follow the instructions for use exactly. Keep away from sources of ignition!

#### Advice on protection against fire and explosion

Keep away from sources of heat and ignition. No smoking. Take action to prevent static discharges. Avoid impact and friction. Use only explosion-proof equipment. Keep away from combustible material. Wear shoes with conductive soles.

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

#### Recommended storage temperature

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Value &lt; 50 °C

**Requirements for storage rooms and vessels**

The official regulations for the storage of pressurised gas packages must be observed. Storage rooms must be properly ventilated. Store away from oxidising gases and other oxidising substances.

**Hints on storage assembly**

Do not store with strong oxidizing agents.

**Storage classes**

Storage class according to TRGS 510 2A Gases

**Further information on storage conditions**

Keep container tightly closed. Keep container in a well-ventilated place. Keep in a cool place

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

Liquefied gas mixture

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Other information**

There are not known any further control parameters.

**8.2. Exposure controls****General protective and hygiene measures**

Do not smoke during work time. Do not inhale gases/vapours/aerosols. Do not eat or drink during work time. Storage of foodstuffs in work rooms is forbidden. Wash hands before breaks and after work.

**Respiratory protection**

In case of insufficient ventilation, wear suitable respiratory equipment. Filter apparatus, filter A/P3

**Hand protection**

Protective gloves

Use chemical-resistant gloves! Suitable for short-term use: 1,4mm Latex or 0,85mm Nitrile (Recommended: Kerbl Fletex (Latex), or Kerbl Chemex (Nitrile))

Hand protection must comply with EN 374.

Protect skin from splashes of liquid.

**Eye protection**

Avoid contact with eyes. Safety glasses with side protection shield; Eye protection must comply with EN 166. Face shield

**Body protection**

Clothing as usual in the chemical industry. Fire-resistant antistatic protective clothing

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

**Physical state** Pressurised liquified gas

**Colour** colourless

**Odour** odourless

**Melting point**

Remarks not determined

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**Freezing point**

Remarks not determined

**Boiling point or initial boiling point and boiling range**

Value -0,5 °C

Remarks Information refers to the main component.

**Flammability**

Flammable.

**Upper and lower explosive limits**

Lower explosion limit 1,4 %(V)

Upper explosion limit 9,4 %(V)

Remarks Information refers to the main component.

**Flash point**

Value -60 °C

Remarks Information refers to the main component.

**Auto-ignition temperature**

Value 365 °C

Remarks Information refers to the main component.

**Decomposition temperature**

Remarks not determined

**pH value**

Remarks not determined

**Viscosity**

Remarks not determined

**Solubility(ies)**

Remarks not determined

**Partition coefficient n-octanol/water (log value)**

Remarks not determined

**Vapour pressure**

Value 2,73 bar

**Density and/or relative density**

Value 0,559

**Relative vapour density**

Value 1,91

**9.2. Other information****Odour threshold**

Remarks not determined

**Evaporation rate (ether = 1) :**

Remarks not determined

**Solubility in water**

Remarks No data available

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**Explosive properties**

evaluation

Container is under pressure: may burst when heated.

**Oxidising properties**

Remarks

not determined

**Other information**

Gas / vapours are heavier than air. Can accumulate in enclosed spaces especially at or below ground level.

**SECTION 10: Stability and reactivity****10.1. Reactivity**

Container is under pressure: may burst when heated.

**10.2. Chemical stability**

No decomposition if used as prescribed.

**10.3. Possibility of hazardous reactions**

No dangerous reactions when stored and handled according to instructions. Vapours can form an explosive mixture with air. May react violently with oxidising substances.

**10.4. Conditions to avoid**

Sun exposure, high temperatures, ignition sources.

**10.5. Incompatible materials**

Reacts violently with: Strong oxidising agents

**10.6. Hazardous decomposition products**

Hazardous decomposition products should not be formed under normal storage and use conditions.

**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute oral toxicity**

Remarks

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

**Acute dermal toxicity**

Remarks

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

**Acute inhalational toxicity**

Remarks

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

**Acute inhalative toxicity (Components)****Butane**

Species

mouse

LC50

1237

mg/l

**propane**

Species

mouse

LC50

1237

mg/l

**Skin corrosion/irritation**

Remarks

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

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### Serious eye damage/irritation

Remarks Based on available data, the classification criteria are not met.

### Sensitization

Remarks Based on available data, the classification criteria are not met.

### Subacute, subchronic, chronic toxicity

Remarks Based on available data, the classification criteria are not met.

### Mutagenicity

Remarks Based on available data, the classification criteria are not met.

### Reproductive toxicity

Remarks Based on available data, the classification criteria are not met.

### Carcinogenicity

Remarks Based on available data, the classification criteria are not met.

### Specific Target Organ Toxicity (STOT)

#### Single exposure

Remarks Based on available data, the classification criteria are not met.

#### Repeated exposure

Remarks 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 with respect to humans

The product does not contain a substance that has endocrine disrupting properties with respect to humans.

### Other information

In low concentrations may cause narcotic effects.

Symptoms may include dizziness, headache, nausea and loss of co-ordination. In high concentrations may cause asphyxiation.

## SECTION 12: Ecological information

### 12.1. Toxicity

#### General information

The product is not expected to be hazardous to the environment.

#### Fish toxicity (Components)

##### Butane

Species	Fish				
LC50	24,11	to	147,54	mg/l	

#### Algae toxicity (Components)

##### Butane

Species	Algae				
EC50	7,71	to	16,5	mg/l	

### 12.2. Persistence and degradability



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**General information**

not determined

**Biodegradability (Components)****Butane**

Value 100 %

Duration of test 385,5 h

Method Biodegradation test, predates, OECD test

**Isobutane**

Value 100 %

Duration of test 385,5 h

Method Biodegradation test, predates, OECD test

**propane**

Value 100 %

Duration of test 385,5 h

Method Biodegradation test, predates, OECD test

**12.3. Bioaccumulative potential****General information**

not determined

**Partition coefficient n-octanol/water (log value)**

Remarks not determined

**12.4. Mobility in soil****General information**

not determined

**12.5. Results of PBT and vPvB assessment****General information**

Mixture does not meet PBT or vPvB criteria.

**Results of PBT and vPvB assessment**

The product contains no PBT substances

The product contains no vPvB substances.

**12.6 Endocrine disrupting properties****Endocrine disrupting properties with respect to the environment**

The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

**12.7. Other adverse effects****General information**

not determined

**General information / ecology**

Do not discharge product unmonitored into the environment.

**SECTION 13: Disposal considerations**

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### 13.1. Waste treatment methods

#### Disposal recommendations for the product

EWC waste code 16 05 04\* gases in pressure containers (including halons) containing dangerous substances

The listed waste code numbers, according to the European Waste Catalogue (EWC), are to be understood as a recommendation. A final decision must be made in agreement with the regional waste disposal company.




Vapours can form an explosive mixture with air.

Waste gas should be flared through a suitable burner with flash back arrestor. Do not discharge into any place where its accumulation could be dangerous. Contact supplier if guidance is required.

#### Disposal recommendations for packaging

Packaging that cannot be cleaned should be disposed off in agreement with the regional waste disposal company.

## SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
14.1. UN number or ID number	2037	2037	2037
14.2. UN proper shipping name	RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES)	RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES)	RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES)
14.3. Transport hazard class(es)	2	2.2	2.2
Label			
Limited Quantity	1 l	1 l	
Transport category	3		
Tunnel restriction code	E		

### Information for all modes of transport

#### 14.6. Special precautions for user

none

### Other information

#### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

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Other transport information:

Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency.

Before transporting product containers ensure that they are firmly secured. Ensure that the container valve

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is closed and not leaking

Ensure that the valve outlet capnut or plug (where provided) is correctly fitted. Ensure that the valve protection device (where provided) is correctly fitted. Ensure adequate ventilation. Ensure compliance with applicable regulations.

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Remark: Both cartridges in the box are without a released device.

## **SECTION 15: Regulatory information**

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

#### **VOC**

VOC (CH) 100 %

### **15.2. Chemical safety assessment**

For this preparation a chemical safety assessment has not been carried out.

## **SECTION 16: Other information**

### **Hazard statements listed in Chapter 3**

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

### **CLP categories listed in Chapter 3**

Flam. Gas 1 Flammable gas, Category 1

Press. Gas (Liq.) Gases under pressure (liquefied gas)

### **Supplemental information**

Relevant changes compared with the previous version of the safety data sheet are marked with: \*\*\*

This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.