

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 20.12.2016

Version number 4

Revision: 20.12.2016

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

- **1.1 Product identifier**
- **Trade name:** **Bartscher Butangas**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Gas cartridge
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Bartscher GmbH
Franz-Kleine-Str. 28
33154 Salzkotten
www.bartscher.de
- **Informing department:**
Tel: +49(0)5258-971-0
Fax: +49(0)5258-971-120
- **1.4 Emergency telephone number:**
Giftnotruf Berlin
Tel. +49 (0)30 30686 700
Helpdesk in German and in English

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Gas 1 H220 Extremely flammable gas.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS02

- **Signal word** Danger
- **Hazard statements**
H220 Extremely flammable gas.
- **Precautionary statements**
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 Eliminate all ignition sources if safe to do so.

(Contd. on page 2)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 20.12.2016

Version number 4

Revision: 20.12.2016

Trade name: Bartscher Butangas

(Contd. from page 1)

P403 Store in a well-ventilated place.

- **Additional information:**

For the product the additional label elements according EN 417 must be applied.

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**

- **Description:** Gas cartridge contains butane gas mixture.

- **Dangerous components:**

CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32-X	butane ⚠ Flam. Gas 1, H220; Press. Gas C, H280	50 - 100%
CAS: 75-28-5 EINECS: 200-857-2 Reg.nr.: 01-2119485395-27-X	isobutane ⚠ Flam. Gas 1, H220; Press. Gas C, H280	2.5-<10%

- **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 symptoms.

In case of unsteady breathing or breathing arrest induce artificial respiration.

- **After skin contact**

The product is not skin irritating.

After frost burns flush at least 15 minutes with water. Cover sterile, consult doctor.

- **After eye contact** Rinse opened eye for several minutes under running water.

- **After swallowing** Swallowing is not considered to be a possible way of exposure.

- **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**

Extinguishing powder, foam or water jet. Fight larger fires with water jet or alcohol-resistant foam.

- **For safety reasons unsuitable extinguishing agents** None known.

- **5.2 Special hazards arising from the substance or mixture**

During incomplete combustion carbon monoxide can be formed.

- **5.3 Advice for firefighters**

- **Protective equipment:**

Use a breathing apparatus that is independent of circulating air when being in closed rooms.

- **Additional information**

Cool endangered containers with water spray.

Remove goods in stock from incendiary zone, if possible.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 20.12.2016

Version number 4

Revision: 20.12.2016

Trade name: Bartscher Butangas

(Contd. from page 2)

Extinguish leaking gas flame only if it is absolutely necessary. A spontaneous explosive re-ignition is possible.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

When entering the area use breathing equipment independent from ambient air, unless innocuity of the atmosphere has been proven.

Ensure adequate ventilation

Keep away from ignition sources

6.2 Environmental precautions:

Prevent material from reaching sewage system, holes and cellars.

Avoid any infiltration into sewage systems, basements, working pits or other places where product accumulations may cause a hazard.

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.

See Section 13 for information on disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

This cartridge conforms to standard EN 417 and must only be used with Bartscher- or Apexa-devices appropriately labelled.

Information about protection against explosions and fires:

Beware: Container is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use.

Keep ignition sources away - Do not smoke.

Vapours are heavier than air and may travel long distances along ground, ignite and flash back to source.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and containers:

Store containers in a well aired place at a temperature of less than 50 °C.

Information about storage in one common storage facility:

Do not store together with oxidizing or self-igniting substances.

Store away from oxidising agents.

Further information about storage conditions: Store at dry and cool places.

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with limit values that require monitoring at the workplace:

106-97-8 butane

WEL (Great Britain)	Short-term value: 1810 mg/m ³ , 750 ppm
	Long-term value: 1450 mg/m ³ , 600 ppm
	Carc (if more than 0.1% of buta-1.3-diene)

Additional information: The lists that were valid during the compilation were used as basis.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 20.12.2016

Version number 4

Revision: 20.12.2016

Trade name: Bartscher Butangas

(Contd. from page 3)

· 8.2 Exposure controls

· Personal protective equipment

· General protective and hygienic measures

The usual precautionary measures should be adhered to general rules for handling chemicals.

· **Breathing equipment:** Not necessary if room is well-ventilated.

· **Protection of hands:** Not required.

· Material of gloves

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.

· Penetration time of glove material

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

· **Eye protection:** Not required.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Gaseous
Colour:	Colourless
Odour:	Nearly odourless

· Change in condition

Melting point/freezing point:	-135 °C
Initial boiling point and boiling range:	-0 °C

· **Flash point:** -60 °C

· **Inflammability (solid, gaseous)** Extremely flammable liquefied gas.

· **Ignition temperature:** 365 °C

· **Explosive properties:** Product is not explosive. However, formation of explosive gas-/air mixtures is possible.

· Critical values for explosion:

Lower:	1.5 Vol %
Upper:	8.5 Vol %

· **Vapour pressure at 20 °C:** 2100 hPa

· **Density at 20 °C** 0.0027 g/cm³

· Solubility in / Miscibility with

Water at 20 °C: 0.061 g/l

· Viscosity:

dynamic:	Not determined.
kinematic:	Not determined.

· Solvent content:

Organic solvents:	93.0 %
Water:	0.0 %

· **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 20.12.2016

Version number 4

Revision: 20.12.2016

Trade name: Bartscher Butangas

(Contd. from page 4)

- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**
Forms explosive gas mixture with air
May react violently with oxidizing substances.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
 - **Acute toxicity** Based on available data, the classification criteria are not met.
 - **LD/LC50 values that are relevant for classification:**
- | | | |
|------------------------|------|--------------------|
| 106-97-8 butane | | |
| Inhalative | LC50 | 1237 mg/l/2h (rat) |
- **Primary irritant effect:**
 - **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.
 - **Additional toxicological information:**
When inhaling high concentrations narcotic symptoms are possible.
 - **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
 - **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
 - **Carcinogenicity** Based on available data, the classification criteria are not met.
 - **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.

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.
- **Additional ecological information:**
- **General notes:**
No dangerous effects by the product on the environment are known.
Generally not hazardous for water.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Ensure cans are completely empty before recycling.

(Contd. on page 6)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 20.12.2016

Version number 4

Revision: 20.12.2016

Trade name: Bartscher Butangas

(Contd. from page 5)

· **European waste catalogue**

15 00 00	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
15 01 00	packaging (including separately collected municipal packaging waste)
15 01 04	metallic packaging

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· **14.1 UN-Number**

· **ADR, IMDG, IATA** UN2037

· **14.2 UN proper shipping name**

· **ADR** 2037 RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES)

· **IMDG, IATA** RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES)

· **14.3 Transport hazard class(es)**

· **ADR**



· **Class** 2 5F Gases.

· **Label** 2.1

· **IMDG, IATA**



· **Class** 2 Gases.

· **Label** 2.1

· **14.4 Packing group**

· **ADR, IMDG, IATA** Void

· **14.5 Environmental hazards:**

· **Marine pollutant:** No

· **14.6 Special precautions for user** Warning: Gases.

· **Kemler Number:**

-

· **EMS Number:**

F-D,S-U

· **Stowage Category**

B

· **Stowage Code**

SW2 Clear of living quarters.

· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

· **Transport/Additional information:**

· **ADR**

· **Limited quantities (LQ)**

1L

· **Excepted quantities (EQ)**

Code: E0

Not permitted as Excepted Quantity

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 20.12.2016

Version number 4

Revision: 20.12.2016

Trade name: Bartscher Butangas

(Contd. from page 6)

· Transport category	2
· Tunnel restriction code	D
· IMDG	
· Limited quantities (LQ)	120 ml
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· UN "Model Regulation":	UN 2037 RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES), 2.1

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS02

- **Signal word** Danger
- **Hazard statements**
H220 Extremely flammable gas.
- **Precautionary statements**
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 Eliminate all ignition sources if safe to do so.
P403 Store in a well-ventilated place.
- **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
- **National regulations**
- **Water hazard class:** Generally not hazardous for water.
- **Substances of very high concern (SVHC) according to REACH, Article 57**
None of the ingredients is contained.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they 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.

(Contd. on page 8)

GB

Safety data sheet
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Revision: 20.12.2016

Trade name: Bartscher Butangas

(Contd. from page 7)

· Department issuing data specification sheet:

This Material Safety Data Sheet has been drawn up in cooperation with:
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· Abbreviations and acronyms:

ADR: Accord européen sur le transport 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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Flam. Gas 1: Flammable gases – Category 1

Press. Gas C: Gases under pressure – Compressed gas

· * Data compared to the previous version altered.

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