

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

Printing date 07.07.2017

Version number 2

Revision: 07.07.2017

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

- **1.1 Product identifier**
- **Trade name:** Gas-Lighter Refill
- **Article number:** 14080, 14081, 21829
- **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 for gas lighters
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Fackelmann GmbH + Co. KG
Sebastian-Fackelmann-Str. 6
91217 Hersbruck
Tel: 09151-811 153
Fax: 09151-811 294
www.fackelmann.de
- **Informing department:** Phone: 09151-811 153
- **1.4 Emergency telephone number:**
Phone 09151-811 153
(Office hours 08:00 - 16:00)
Poisoning Information Center Fribourg
Mathildenstr. 1
D-79106 Freiburg
Germany
Tel.: +49-(0)761-19240
giftinfo@uniklinik-freiburg.de
(Information in German and English)

SECTION 2: Hazards identification

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



GHS02 flame

Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

- **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**
H222-H229 Extremely flammable aerosol. Pressurised container: May burst 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.
- P211 Do not spray on an open flame or other ignition source.
- P251 Do not pierce or burn, even after use.

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P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

- **Labelling of packages where the contents do not exceed 125 ml**
- **Hazard pictograms**



GHS02

- **Signal word** Danger
- **Hazard statements**
H222-H229 Extremely flammable aerosol. Pressurised container: May burst 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.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
- **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: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21-X	propane ⚠ Flam. Gas 1, H220; Press. Gas C, H280	10 - 25%

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information** No special measures required.
- **After inhalation**
Provide fresh air. Keep victims quiet and warm.
Seek medical treatment in case of complaints.
- **After skin contact**
In cases of freeze burns, rinse with plenty of water. Do not remove clothing.
After frost burns flush at least 15 minutes with water. Cover sterile, consult doctor.
- **After eye contact**
Keep eye lids open and rinse them with ample amounts of clean running water for at least 15 minutes.
Remove contact lenses if possible.
Call a doctor immediately.
- **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.

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- **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, extinguishing powder or water spray. Fight larger fires with water spray.
- **For safety reasons unsuitable extinguishing agents** Water with a full water jet.
- **5.2 Special hazards arising from the substance or mixture**
Can form explosive gas-air mixtures.
Can be released in case of fire:
Carbon monoxide (CO)
- **5.3 Advice for firefighters**
- **Protective equipment:**
Use a breathing apparatus that is independent of circulating air when being in closed rooms.
- **Additional information**
Remove goods in stock from incendiary zone, if possible.
Use water to keep fire exposed containers cool.
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**
Ensure adequate ventilation
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
Keep away from sources of ignition - No smoking.
- **6.2 Environmental precautions:**
Prevent material from reaching sewage system, holes and cellars.
- **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**
Store in cool, dry place in tightly closed containers.
Keep away from heat and direct sunlight.
Avoid contact with eyes and skin.
Use only in well ventilated areas.
- **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.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:**
Store in cool location.
Store only in the original container.
- **Information about storage in one common storage facility:**
Keep away from food, drink and animal feeding stuffs.

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- **Further information about storage conditions:**
Store in cool, dry conditions in a well ventilated area.
- **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)
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· 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 required.

· Protection of hands:

Use gloves of stable material (i.e. nitril rubber).

· 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.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Liquefied gas
Colour:	Colourless
Odour:	Characteristic

· Change in condition

Initial boiling point and boiling range: -44 °C

· **Flash point:** -80 °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:	10.9 Vol %

· **Vapour pressure at 20 °C:** 8300 hPa

· **Density at 20 °C** ca. 0.5 g/cm³

· Solubility in / Miscibility with

Water: Slightly soluble

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- **Solvent content:**
- 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.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
Danger of bursting at temperatures above 50 °C.
Avoid direct sunlight, heat and ignition sources.
- **10.3 Possibility of hazardous reactions** Forms explosive gas mixture with air
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** Avoid contact with strong oxidizing agents.
- **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	1,237 mg/l/2h (rat)
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- **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.
- **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** Does not accumulate in organisms
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** 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.

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SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Ensure cans are completely empty before recycling.
- **Uncleaned packagings:**
- **Recommendation:**
Dispose of packaging according to regulations on the disposal of packagings.
Empty containers are to be introduced to the scrap processing and/or to the reconditioning. Packing drums which are not duly emptied belong to hazardous waste.

SECTION 14: Transport information

· 14.1 UN-Number · ADR, IMDG, IATA	UN1950
· 14.2 UN proper shipping name · ADR · IMDG, IATA	1950 AEROSOLS AEROSOLS
· 14.3 Transport hazard class(es) · ADR	
	
· Class · Label	2 5F Gases. 2.1
· IMDG, IATA	
	
· Class · Label	2 Gases. 2.1
· 14.4 Packing group · ADR, IMDG, IATA	Void
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user · Kemler Number: · EMS Number: · Stowage Code	Warning: Gases. - F-D,S-U SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.

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<ul style="list-style-type: none"> · Segregation Code 	SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.
<ul style="list-style-type: none"> · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code 	Not applicable.
<ul style="list-style-type: none"> · Transport/Additional information: 	
<ul style="list-style-type: none"> · ADR · Limited quantities (LQ) · Excepted quantities (EQ) 	
	1L
	Code: E0
	Not permitted as Excepted Quantity
<ul style="list-style-type: none"> · Transport category · Tunnel restriction code 	2 D
<ul style="list-style-type: none"> · IMDG · Limited quantities (LQ) · Excepted quantities (EQ) 	
	0
	Code: E0
	Not permitted as Excepted Quantity
<ul style="list-style-type: none"> · UN "Model Regulation": 	UN 1950 AEROSOLS, 2.1

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category** P3a FLAMMABLE AEROSOLS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 150 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **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

- **Relevant phrases**
H220 Extremely flammable gas.
H280 Contains gas under pressure; may explode if heated.
- **Department issuing data specification sheet:**
This Material Safety Data Sheet has been drawn up in cooperation with:
DEKRA Assurance Services GmbH, Hanomagstr. 12, D-30449 Hanover, Germany,
phone: (+49) 511 42079 - 0, reach@dekra.com.
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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

Aerosol 1: Aerosols – Category 1

Press. Gas C: Gases under pressure – Compressed gas

· * Data compared to the previous version altered.

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