



SAFETY DATA SHEET

[In accordance with the criteria of Regulation No 1907/2006 (REACH) and 453/2010]

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

1.1 Product identifier

GAS LIGHTER REFILL

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

Relevant identified uses: gas lighter refill. Uses advised against: not determinate.

1.3 Details of the supplier of the safety data sheet

Manufacturer: **Unilight Polska Sp. z o.o.**

Address: ul. Zachodnia 3, 55-011 Siechnice, Poland

Telephone/Fax number: +48 71 / 381 95 95 ext. 24 / +48 71 / 381 95 95 ext. 21 or 27 or 694 412 795

E-mail address for a competent person responsible for SDS: unilight@unilight.pl

1.4 Emergency telephone number

112

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to 1999/45/EC

F+ R12

Extremely flammable.

Classification according to 1272/2008/EC

Fam. Aerosol 1 H222, H229

Extremely flammable aerosol. Pressurised container: May burst if heated.

2.2 Label elements

Hazard symbols and signal words



DANGER

Hazard statements

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

P251 Pressurized container: Do not pierce or burn, even after use.

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

P102 Keep out of reach of children.

2.3 Other hazards

No information whether the substance or mixture meets criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation. The mixture wasn't tested. Rapid evaporation can cause frostbite.

Section 3: Composition/information on ingredients

3.1 Substances

Not applicable.



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3.2 Mixtures

Isobutane

CAS number: 75-28-5
 EC number: 200-857-2
 Registration number: substance comes under the law of temporary period
 Classification acc. to 67/548/EC: **F+ R12**
 Classification acc. to 1272/2008/EC: Flam. Gas 1 H220, Press. Gas H280

Butane

CAS number: 106-97-8
 EC number: 203-448-7
 Registration number: substance comes under the law of temporary period
 Classification acc. to 67/548/EC: **F+ R12**
 Classification acc. to 1272/2008/EC: Flam. Gas 1 H220, Press. Gas H280

Isobutane & Butane

Range of percentages: 50-90%

Propane

Range of percentages: 5-35%
 CAS number: 74-98-6
 EC number: 200-827-9
 Registration number: substance comes under the law of temporary period
 Classification acc. to 67/548/EC: **F+ R12**
 Classification acc. to 1272/2008/EC: Flam. Gas 1 H220, Press. Gas H280

Full text of each relevant H and R phrase is in chapter 16.

Section 4: First aid measures

4.1 Description of first aid measures

Skin contact: take off contaminated clothes. Wash frost-bitten areas with plenty of water. Remove contaminated clothing, if it is possible. Do not remove clothing if it adheres constantly to the skin. Get warm frost-bitten areas slowly. Cover wound with sterile dressing. Do not use ointments or powders.

Eye contact: wash out with plenty of water with the eyelid hold wide open for 10-15 min. Remove any contact lenses. Use sterile dressing. Seek medical advice.

Ingestion: not applicable.

Inhalation: remove to fresh air. Keep warm and calm. Consult a doctor, if symptoms persist.

4.2 Most important symptoms and effects, both acute and delayed

Skin contact: contact with liquid gas can cause frostbite.

Eye contact: contact with liquid gas can cause frostbite, damage of cornea.

Inhalation: low concentrate of gas in the air causes lacrimation, cough, narcosis, high concentrate of gas causes dizziness, nausea, vomiting, dyspnoea, clouding of consciousness, drowsiness. In concentration >70% it causes an obvious fall in blood pressure, loss of consciousness, tremors, breathing abnormalities and death.

4.3 Indication of any immediate medical attention and special treatment needed

Physician makes a decision regarding further medical treatment after thoroughly examination of the injured.

Section 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: CO₂, dry chemical, water spray, foam.

Small fire: out of doors – let the gas burn out; indoor – use powder extinguisher.

Large fire: isolate a source of gas and use water spray.

Unsuitable extinguishing media: water jet – risk of the propagation of the flame.



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5.2 Special hazards arising from the substance or mixture

May produce toxic fumes of carbon monoxide if burning. Do not inhale combustion products.

5.3 Advice for firefighters

Personal protection typical in case of fire. Wear suitable respiratory equipment and protected clothes. Product is extremely flammable. It forms explosive mixtures with air. Gas is heavier than air and can accumulate in the lower sections of enclosed spaces. It displaces oxygen from the air. Cool down containers with water to prevent bursting.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: limit the access for the outsiders into the breakdown area, until the suitable cleaning operations are completed. Do not use any open flame. No smoking. Take precautionary measures against static discharges. Wear adequate personal protective equipment. Avoid contact with skin and eyes.

For emergency responders: ensure that removing the problem and its results is conducted by a trained personnel only. Wear chemical resistant safety clothing.

6.2 Environmental precautions

Do not empty into drains (danger of explosion). Notify relevant emergency services.

6.3 Methods and material for containment and cleaning up

Small spillage: let the gas evaporate and ventilate well.

Large spillage: eliminate a source of gas if it is possible. Disperse the gas by water mist or safety curtain.

6.4 Reference to other sections

Appropriate conduct with waste product – see section 13.

Personal protective equipment – see section 8.

Section 7: Handling and storage

7.1 Precautions for safe handling

Handle in accordance with good occupational hygiene and safety practices. Avoid contact with skin and eyes. Do not pierce or burn, even after use. Ensure adequate ventilation of area, where the product is used. Protect from sources of ignition – do not smoke during filling. Gas can form explosive mixtures with air.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed, in dry, cool and well-ventilated place. Keep away from sources of ignition. Protect from temperature above 50°C. Avoid direct expose to sunlight. Keep away from food, beverages or feed for animals. Do not smoke, use open flame and sparking tools.

7.3 Specific end use(s)

Gas lighter refill.

Section 8: Exposure controls/personal protection

8.1 Control parameters

Country	BUTANE	PROPANE
Germany	MAK: 1900 mg/m ³	MAK: 1800 mg/m ³
Italy	TWA: 1900 mg/m ³	TWA: 4508 mg/m ³
France	VME: 1900 mg/m ³	VME: 1800 mg/m ³
Hungary	AK: 2350 mg/m ³ , CK: 9400 mg/m ³	-
Spain	TLV TWA: 1900 mg/m ³	-
UK	WEL: 1450 mg/m ³	-



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8.2. Exposure controls

Use the product in accordance with good occupational hygiene and safety practices. When handlings do not eat, drink or smoke. Before break and after work carefully wash hands. Ensure adequate ventilation. Avoid contact liquid gas with skin and eyes.

Hand and body protection

Use protective gloves from neoprene or nitril rubber. Gloves should be flexible at a temperature below the atmospheric boiling point of the gas. It may be necessary to increase the frequency of change gloves if there is immersion or prolonged contact with the product.

The material that the gloves are made of must be impenetrable and resistant to the product's effects. The selection of material must be performed with consideration of breakthrough time, penetration speed and degradation. Moreover, the selection of proper gloves depends not only on the material, but also on other quality features and changes depending on the manufacturer. The producer should provide detailed information regarding the exact breakthrough time. This information should be followed.

Eye/face protection

Use protective google if there is a risk of spraying liquid gas.

Respiratory protection

Normal not required. If concentration of oxygen is lower than 17% or max. concentration of gas in air is more than 1% use self-contained breathing apparatus.

Environmental exposure controls

Gas evaporates very quickly. It doesn't cause contamination of environment.



Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

physical state:	liquefied gas
colour:	colorless
odour:	characteristic, weak
odour threshold:	not determinated
pH:	not applicable
melting point/freezing point:	not determinated
initial boiling point and boiling range:	- 42 - 0°C
flash point: evaporation	ca. - 80°C
rate: flammability (solid, gas):	not determinated extremely flammable
upper/lower flammability or explosive limits:	10,9 % vol./1,5% vol.
vapour pressure (20°C):	1 200 – 7 500 hPa
vapour density:	not determinated
relative density:	0,5 – 0,58 g/cm ³
solubility(ies):	< 0,1 g/l
partition coefficient: n-octanol/water:	not determinated
auto-ignition temperature:	not determinated
decomposition temperature:	not determinated
explosive properties:	it forms explosive mixture with air
oxidising properties:	not display
viscosity:	not determinated

9.2 Other information

No additional data.

Section 10: Stability and reactivity

10.1 Reactivity

Product reacts with strong oxidizing agents. It nitrations and chlorinations.



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10.2 Chemical stability

The product is stable under normal conditions.

10.3 Possibility of hazardous reactions

Gas forms explosive mixture with air.

10.4 Conditions to avoid

Avoid direct sunlight, source of ignition, temperature above 50°C and static discharges.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Not known.

Section 11: Toxicological information

11.1 Information on toxicological effects

Information regarding acute and/or delayed results of the exposure was defined on the basis of the information on product's classification and/or toxicological studies as well as the experience and knowledge of the manufacturer.

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 sensitization

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

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

Product is not classified as dangerous for environment.

12.2 Persistence and degradability

It oxidizes very quickly in air (photochemical reaction).

12.3 Bioaccumulative potential

Does not accumulate in environment.

12.4 Mobility in soil

Product evaporates very quickly from soil and water. It dispersed in air.



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12.5 Results of PBT and vPvB assessment

Not applicable.

12.6 Other adverse effects

This product has no influence on the global warming or the ozone layer depletion.

Section 13: Disposal considerations

13.1 Waste treatment methods

Disposal methods for the product: disposal in accordance with the local legislation. Small quantities can be removed with household garbage. Store remainings in original containers. Recycle, if possible.

Disposal methods for used packing: empty containers give for appropriate rubbish dump or for disposal in accordance with the local legislation. Dispose of uncleanable containers like of the product.

Legal basis: Directive 2008/98/EC, 94/62/EC.

Section 14: Transport information

14.1 UN number (ONZ number)

1057 < 115 ml or 65 g, UN 1950 LQ >115 ml or 65 g

14.2 UN proper shipping name

AEROSOLS, flammable

14.3 Transport hazard class(es)

2

14.4 Packing group Not

applicable.

14.5 Environmental hazards

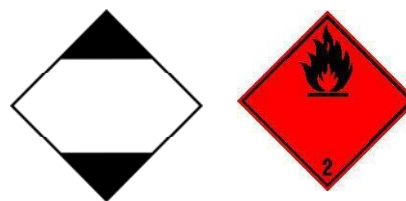
Product is not dangerous for environment.

14.6 Special precautions for user

While handle the product, wear personal safety clothing, as indicated in section 8. Avoid direct sunlight, source of ignition, temperature above 50°C and static discharges.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.



Section 15: Regulatory information

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

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (Text with EEA relevance).

Council Directive 67/548/EEC of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labeling of dangerous substances.

Directive 1999/45/EC of the European Parliament and of the Council of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations.

Commission Regulation (EC) No 790/2009 of 10 August 2009 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures (Text with EEA relevance).



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Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (Text with EEA relevance).

15.2 Chemical safety assessment

There is no data concerning chemical safety assessment performed for substances contained in the mixture.

Section 16: Other information

Full text of indicated R and H phrases mentioned in chapter 3

R12	Extremely flammable.
H220	Extremely flammable gas.
H280	Contains gas under pressure; may explode if heated.

Clarification of aberrations and acronyms

PBT	Persistent, Bioaccumulative and Toxic substance
vPvB	very Persistent, very Bioaccumulative substance
Flam. Gas 1	Flammable gas, category 1
Press. Gas	Gases under pressure

Trainings

Before commencing working with the product, the user should learn the Health & Safety regulations, regarding handling chemicals, and in particular, undergo a proper workplace training. Persons related to the transportation of the dangerous goods in compliance with the ADR Agreement should be properly trained within the scope of performed tasks (general training, on-the-job training and training related to the safety issues).

Other data

Date of update:	11.04.2013.
Version:	3.0/EN
Modifications:	section: 2, 14, 15, 16.
Composed by:	mgr inż. Anna Łuczak (on the basis of producer's data).
Safety Data Sheet made by:	„ THETA ” Technical Consulting

The information above is based on a current available data concerning the product, but also on the experience and knowledge in this field of the producer. They are neither a quality description of the product nor a guarantee of particular features. They are to be treated as aid to safety in transport, storage and usage of the product. That does not free the user from the responsibility of improper usage of the information above and also of improper compliance with the law norms in the field.