

# MATERIAL 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

- CIGARETTE LIGHTERS & UTILITY LIGHTERS

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

- Relevant identified uses: Cigarette Lighters & Utility Lighters
- Uses advised against: not determinate.

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

- Importer:
- Address:
- Tel & Fax:
- E-Mail:

### 1.4 Emergency telephone number

- 112

## Section 2: Hazards identification

### 2.1 Classification of the substance or mixture

- Human health hazards  
If product is handling in accordance with good occupational hygiene and safety practices, it will be not dangerous for health or human life.
- Environmental effects  
Product is not classified as dangerous for environment.
- Physicochemical adverse effects  
Extremely flammable.

### 2.2 Label elements

- Hazard symbols  
Extremely Flammable
- Substance name for labelling  
N/A
- Risk phrases  
Extremely flammable
- Safety phrases  
Keep out of the reach of children  
Keep container in a well-ventilated place  
Keep away from sources of ignition - No smoking



### 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.

**MATERIAL SAFETY DATA SHEET****Section 3: Composition/ information on ingredients****3.1 Substances**

- N/A

**3.2 Mixtures**

- ISO-Butane  
Range of percentages: < 95%  
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: R12



Classification acc. to 1272/2008/EC: Flam. Gas 1 H220, Press. Gas

- Butane  
Range of percentages: < 95%  
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: R12



Classification acc. to 1272/2008/EC: Flam. Gas 1 H220, Press. Gas

- Propane  
Range of percentages: < 95%  
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: R12



Classification acc. to 1272/2008/EC: Flam. Gas 1 H220, Press. Gas

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.

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- Ingestion: N/A
- Inhalation: Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Keep the affected person warm and at rest. Get prompt medical attention.

### 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 and loss of consciousness.
- Ingestion: N/A

### 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: Fire-fighting measures

### 5.1 Extinguishing media

- CO<sub>2</sub>, 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.

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

- Hazardous Combustion Products  
During fire, toxic gases (CO, CO<sub>2</sub>) are formed.
- Unusual Fire & Explosion Hazards  
Extremely flammable. May explode in a fire.
- Specific Hazards  
Fire or high temperatures create: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

## 5.3 Advice for fire-fighters

- Special Fire Fighting Procedures  
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. Ventilate closed spaces before entering them. Move container from fire area if it can be done without risk. Use water to keep fire exposed containers cool and disperse vapours. Cool containers exposed to flames with water until well after the fire is out. Fight advanced or massive fires from safe distance or protected location.
- Protective Measures In Fire  
Self contained breathing apparatus and full protective clothing must be worn in case of fire.

## 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

- Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate.
- 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.
- Additional information on health hazards – see section 11.

**MATERIAL SAFETY DATA SHEET****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. Read and follow manufacturer's recommendations. Keep away from heat, sparks and open flame. Provide good ventilation. Only use with compatible / applicable appliances. Do not store in basements, cellars, etc., low-level points where vapours can accumulate or in vehicles (heating by sun).

**7.2 Conditions for safe storage, including any incapability**

- Keep container tightly closed, in dry, cool and well-ventilated place. Keep away from sources of ignition. Protect from temperature above 50°C/122°F. Avoid direct expose to sunlight. Keep away from food, beverages or feed for animals. Do not smoke, use open flame and sparking tools.
- Storage Class
  - Flammable compressed gas storage.

**7.3 Specific end use(s)**

- The identified uses for this product are detailed in Section 1.2.

**Section 8: Exposure controls/personal protection****8.1 Control parameters**

	Butane	Propane
Germany	MAK: 1900 mg/m <sup>3</sup>	MAK: 1800 mg/m <sup>3</sup>
Italy	TWA: 1900 mg/m <sup>3</sup>	TWA: 4508 mg/m <sup>3</sup>
France	VME: 1900 mg/m <sup>3</sup>	VME: 1800 mg/m <sup>3</sup>
Hungary	AK: 2350 mg/m <sup>3</sup> CK: 9400 mg/m <sup>3</sup>	-
Spain	TLV TWA: 1900 mg/m <sup>3</sup>	-
United Kingdom	WEL: 1450 mg/m <sup>3</sup>	-

**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.  
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.

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- Eye/face protection  
Use protective goggles if there is a risk of spraying liquid gas.
- Respiratory protection  
Normally 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:                               | Gas  |
| ▪ colour:                                       | colorless                                  |
| ▪ odour:  | characteristic, weak, Faint. Disagreeable. |
| ▪ odour threshold:                              | not determined                             |
| ▪ pH:   | not determined                             |
| ▪ melting point/freezing point:                 | not determined                             |
| ▪ initial boiling point and boiling range:      | -42 - 0°C @ 760 mm Hg                      |
| ▪ flash point:                                  | -80°C                                      |
| ▪ evaporation rate:                             | not determined                             |
| ▪ flammability (solid, gas):                    | N/A  |
| ▪ upper/lower flammability or explosive limits: | 10,9 % vol./1,5% vol.                      |
| ▪ vapour pressure:                              | 1 200 – 7 500 hPa / 3 bar @ 20°C           |
| ▪ vapour density:                               | 0.58 @ 15°C @ 1 atmosphere pressure        |
| ▪ relative density:                             | 0,5 – 0,58 g/cm <sup>3</sup>               |
| ▪ solubility(ies):                              | <0,1 g/l                                   |
| ▪ partition coefficient n-octanol/water:        | not determined                             |
| ▪ auto-ignition temperature:                    | 365°C @ 1 atmosphere pressure              |
| ▪ decomposition temperature:                    | not determined                             |
| ▪ explosive properties:                         | it forms explosive mixture with air        |
| ▪ oxidising properties:                         | not display                                |
| ▪ viscosity:                                    | not determined                             |

**9.2 Other information**

- N/A

**Section 10: Stability and reactivity**

**10.1 Reactivity**

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

**10.2 Chemical stability**

- Stable under normal temperature conditions and recommended use.

**10.3 Possibility of hazardous reactions**

- Gas forms explosive mixture with air.

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### 10.4 Conditions to avoid

- Avoid direct sunlight, source of ignition, temperature above 50°C/122°F and static discharges.

### 10.5 Incompatible materials

- Strong oxidizing substances.

### 10.6 Hazardous decomposition products

- During fire, toxic gases (CO, CO<sub>2</sub>) are formed.

## 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.
- Route of entry  
Inhalation, Skin and/or eye contact.
- Target Organs  
Central nervous system Eyes Respiratory system, lungs
- 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.

## Section 12: Ecological information

### 12.1 Toxicity

- Product is not classified as dangerous for environment.

### 12.2 Persistence and degradability

- It oxides very quickly in air (photochemical reaction).
- There are no data on the degradability of this product.

### 12.3 Bio-accumulative potential

- No data available on bioaccumulation.

### 12.4 Mobility in soil

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

### 12.5 Results of PBT and vPvB assessment

- This product does not contain any PBT or vPvB Substances.

### 12.6 Other adverse effects

- None known.

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## Section 13: Disposal considerations

### 13.1 Waste treatment methods

- Make sure containers are empty before discarding (explosion risk). Do not puncture or incinerate even when empty. This material and its container must be disposed of in a safe way. Dispose of waste and residues in accordance with local authority requirements. Recover and reclaim or recycle, if practical.
- 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.

## Section 14: Transport information

### 14.1 UN number

- UN No. (ADR/RID/ADN): 1057
- UN No. (IMDG): 1057
- UN No. (ICAO): 1057

### 14.2 UN proper shipping name

- Lighters

### 14.3 Transport hazard class(es)

- ADR/RID/ADN Class: 2. Classification Code 6F.
- ADR/RID/ADN Class: Class 2.1: Flammable gases.
- ADR Label No.: 2.1
- IMDG Class: 2.1
- ICAO Class/Division: 2.1

### 14.4 Packing group

- N/A

### 14.5 Environmental hazards

- Product is not dangerous for environment.



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### 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/122 °F and static discharges.
- EMS: F-D, S-U
- Emergency Action Code: Not applicable.
- Tunnel Restriction Code: (D) & (E)

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

- N/A

## 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).

**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).

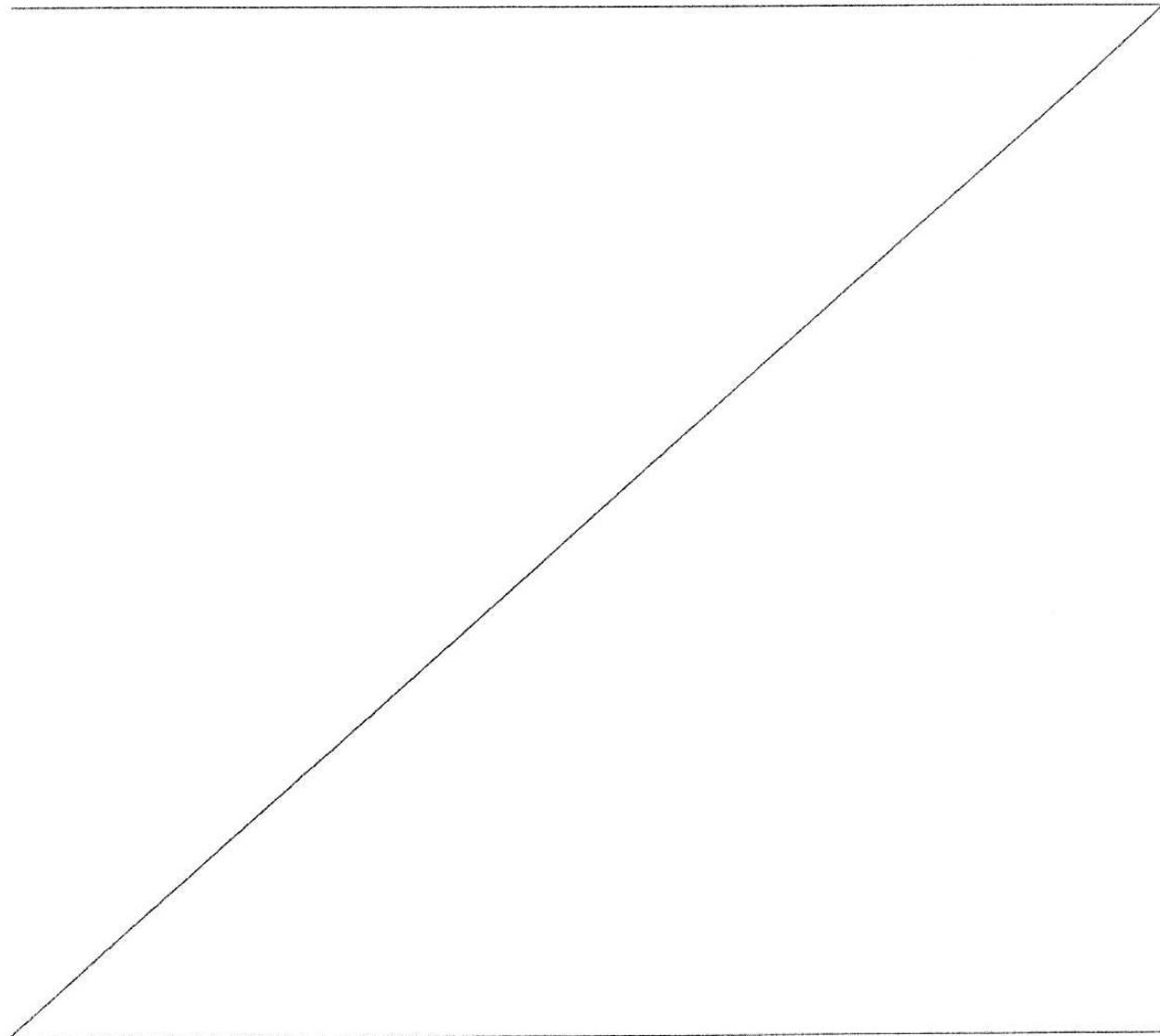
### 15.2 Chemical safety assessment

- There is no data concerning chemical safety assessment performed for substances contained in the mixture. No chemical safety assessment has been carried out.

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## Section 16: Other information

- Full text of indicated R and H phrases mentioned in chapter 3
  - R12 Extremely flammable.
  - H220 Extremely flammable gas.
  
- Other data
  - Date of issue: 01.01.2012
  - Date of revision: 01.01.2013
  - Version: 2.3/EN
  - Revision Comments: NONE



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.