

Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and
GHS

Printing date 18.02.2013

Revision: 18.02.2013

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

1.1 Product identifier

Trade name: **Butane Fuel**

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

No further relevant information available.

Application of the substance / the preparation Fuel

1.3 Details of the supplier of the Safety Data Sheet

Manufacturer/Supplier:

SternoCandleLamp
1880 Compton Ave. 101
Corona, CA 92881
Phone: 951-682-9600

Further information obtainable from: Product Safety Department



1.4 Emergency telephone number:

ChemTel Inc.
(800)255-3924, +1 (813)248-0585

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.

Press. Gas H280 Contains gas under pressure; may explode if heated.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC



F+; Extremely flammable

R12: Extremely flammable.

Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

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· Hazard pictograms



GHS02

· Signal word Danger

· Hazard statements

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from heat/sparks/open flames/hot surfaces. - 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.

P410+P403 Protect from sunlight. Store in a well-ventilated place.

P403 Store in a well-ventilated place.

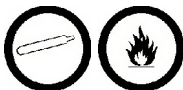
· Additional information: N/A

· Hazard description:

· WHMIS-symbols:

A - Compressed gas

B1 - Flammable gas



· NFPA ratings (scale 0 - 4)



Health = 0

Fire = 4

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 0

Fire = 4

Reactivity = 0

· HMIS Long Term Health Hazard Substances

None of the ingredients is listed.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

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3 Composition/information on ingredients

3.2 Mixtures

· **Description:** Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

| | | | |
|--|-----------|---|---------|
| CAS: 106-97-8 EINECS: 203-448-7 Index number: 601-004-00-0 | butane |  F+ R12  Flam. Gas 1, H220 Press. Gas, H280 | 50-100% |
| CAS: 75-28-5 EINECS: 200-857-2 Index number: 601-004-00-0 | isobutane |  F+ R12  Flam. Gas 1, H220 Press. Gas, H280 | 25-50% |
| CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5 | propane |  F+ R12  Flam. Gas 1, H220 Press. Gas, H280 | 2,5-10% |

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

4.1 Description of first aid measures

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Generally the product does not irritate the skin.

· After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** If symptoms persist consult doctor.

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.

5 Firefighting measures

5.1 Extinguishing media

· Suitable extinguishing agents:

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **For safety reasons unsuitable extinguishing agents:** Water with full jet

· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

· 5.3 Advice for firefighters

· **Protective equipment:** No special measures required.

· **Additional information** Cool endangered receptacles with water spray.

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6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

- **6.2 Environmental precautions:**

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

- **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 disposal information.

7 Handling and storage

- **7.1 Precautions for safe handling** Open and handle receptacle with care.

- **Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- **7.2 Conditions for safe storage, including any incompatibilities**

- **Storage:**

- **Requirements to be met by storerooms and receptacles:** Store in a cool location.

- **Information about storage in one common storage facility:** Not required.

- **Further information about storage conditions:**

Store in cool, dry conditions in well sealed receptacles.

Keep container tightly sealed.

Do not seal receptacle gas tight.

Protect from heat and direct sunlight.

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

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **8.1 Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

106-97-8 butane

| | |
|--------------------------|---|
| REL (USA) | 1900 mg/m ³ , 800 ppm |
| TLV (USA) | Varies mg/m ³ , 1000 ppm |
| EL (Canada) | Short-term value: 750 ppm Long-term value: 600 ppm |
| EV (Canada) | 800 ppm |
| 75-28-5 isobutane | |
| REL (USA) | 1900 mg/m ³ , 800 ppm |

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| | |
|------------------------|-------------------------------------|
| TLV (USA) | Varies mg/m ³ , 1000 ppm |
| EV (Canada) | 800 ppm |
| 74-98-6 propane | |
| PEL (USA) | 1800 mg/m ³ , 1000 ppm |
| REL (USA) | 1800 mg/m ³ , 1000 ppm |
| TLV (USA) | Varies mg/m ³ , 1000 ppm |
| EL (Canada) | 1000 ppm |
| EV (Canada) | 1,000 ppm |

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:** Wash hands before breaks and at the end of work.

· **Respiratory protection:** Use suitable respiratory protective device in case of insufficient ventilation.

· **Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **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:**



Tightly sealed goggles

9 Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Compressed liquefied gas

Colour: Colourless

· **Odour:** Like rotten eggs (mercaptans)

· **Odour threshold:** Not determined.

· **pH-value:** Not determined.

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| | |
|---|---|
| · Change in condition | |
| Melting point/Melting range: | Undetermined. |
| Boiling point/Boiling range: | -11 °C |
| · Flash point: | < 0 °C |
| · Flammability (solid, gaseous): | Not determined. |
| · Ignition temperature: | 365 °C |
| · Decomposition temperature: | Not determined. |
| · Self-igniting: | Product is not self-igniting. |
| · Danger of explosion: | Product is not explosive. However, formation of explosive air/vapour mixtures are possible. |
| · Explosion limits: | |
| Lower: | 1,5 Vol % |
| Upper: | 8,5 Vol % |
| · Vapour pressure at 20 °C: | 3000 hPa |
| · Density at 20 °C: | 0,55 g/cm ³ |
| · Relative density | Not determined. |
| · Vapour density | Not determined. |
| · Evaporation rate | Not applicable. |
| · Solubility in / Miscibility with water: | Not miscible or difficult to mix. |
| · Partition coefficient (n-octanol/water): | Not determined. |
| · Viscosity: | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| · Solvent content: | |
| Organic solvents: | 70,0 % |
| · 9.2 Other information | No further relevant information available. |

10 Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.

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· **10.6 Hazardous decomposition products:** Carbon monoxide

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11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

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:** 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.

13 Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|---|---|
| <ul style="list-style-type: none"> · 14.1 UN-Number · DOT, ADR, IMDG, IATA | <p>UN1075</p> |
| <ul style="list-style-type: none"> · 14.2 UN proper shipping name · DOT, IMDG, IATA · ADR | <p>PETROLEUM GASES, LIQUEFIED 1075 PETROLEUM GASES, LIQUEFIED</p> |

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· **14.3 Transport hazard class(es)**

· **DOT**



· **Class** 2.1
 · **Label** 2.1

· **ADR**



· **Class** 2 2F Gases.
 · **Label** 2.1

· **IMDG, IATA**



· **Class** 2.1
 · **Label** 2.1

· **14.4 Packing group**

· **DOT, ADR, IMDG, IATA** N/A

· **14.5 Environmental hazards:**

· **Marine pollutant:** No

· **14.6 Special precautions for user**

· **Danger code (Kemler):** Warning: Gases.
 20
 · **EMS Number:** F-D, S-U

· **14.7 Transport in bulk according to Annex II of
 MARPOL73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**

· **ADR**

· **Limited quantities (LQ)** 0
 · **Transport category** 2
 · **Tunnel restriction code** B/D

· **UN "Model Regulation":**

UN1075, PETROLEUM GASES, LIQUEFIED, 2.1

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15 Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

- **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

- **Proposition 65 (California):**

Note: There are no Proposition 65 substances listed in this chemical formulation. However, the metal container may contain trace amounts (less than 0.1% by weight) of lead, a substance known to the State of California to cause reproductive toxicity (males and females), developmental toxicity, and/or cancer. Increased risk of lead toxicity is not anticipated with normal use of this product. Notes below reference the chemical formulation only.

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogenic Categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

- **Canada**

- **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

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| |
|--|
| · Canadian Ingredient Disclosure list (limit 0.1%) |
| None of the ingredients is listed. |
| · Canadian Ingredient Disclosure list (limit 1%) |
| 106-97-8 butane |
| · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out. |

16 Other information

This information is based on our present knowledge. However, this 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.

- R12 Extremely flammable.

- **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

- DOT: US Department of Transportation

- IATA: International Air Transport Association

- GHS: Globally Harmonized System of Classification and Labelling of Chemicals

- ACGIH: American Conference of Governmental Industrial Hygienists

- NFPA: National Fire Protection Association (USA)

- HMSI: Hazardous Materials Identification System (USA)

- WHMIS: Workplace Hazardous Materials Information System (Canada)

- **Sources**

- SDS Prepared by:

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