1 Identification

Product identifier
Trade name: Butane Fuel
Other means of identification: No other identifiers
Recommended use and restriction on use
Recommended use: Fuel
Restrictions on use: No relevant information available.

Details of the supplier of the Safety Data Sheet
Manufacturer/Supplier:
Sterno Products
1880 Compton Ave. #101
Corona, CA 92881
Phone: (951) 682-9600

Emergency telephone number:
ChemTel Inc.
(800)255-3924 (North America)
+1 (813)246-0585 (International)

2 Hazard(s) identification

Classification of the substance or mixture
Flam. Gas 1 H220 Extremely flammable gas.
Press. Gas H280 Contains gas under pressure; may explode if heated.

Label elements
GHS label elements
The product is classified and labeled according to the Globally Harmonized System (GHS).
Hazard pictograms:

GHS02 GHS04

Signal word: Danger
Hazard statements:
H220 Extremely flammable gas.
H280 Contains gas under pressure; may explode if heated.
Precautionary statements:
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.

Other hazards There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

Chemical characterization: Mixtures

(Cont'd. on page 2)
Trade name: Butane Fuel

<table>
<thead>
<tr>
<th>Components:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>60-80%</td>
</tr>
<tr>
<td></td>
<td>20-40%</td>
</tr>
<tr>
<td></td>
<td>&lt;5%</td>
</tr>
</tbody>
</table>

Additional information:
For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret. For the wording of the listed Hazard Statements, refer to section 16.

4 First-aid measures

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.
In cases of frostbite, rinse with plenty of water. Do not remove clothing.
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:
Unlikely route of exposure.
If symptoms persist consult doctor.
Most important symptoms and effects, both acute and delayed: No relevant information available.
Indication of any immediate medical attention and special treatment needed:
No relevant information available.

5 Fire-fighting measures

Extinguishing media
Suitable extinguishing agents:
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
For safety reasons unsuitable extinguishing agents: Water stream.
Special hazards arising from the substance or mixture
Contains gas under pressure; may explode if heated.
In case of fire, the following can be released:
Carbon monoxide (CO)
Advice for firefighters
Protective equipment:
Wear fully protective suit.
Wear self-contained respiratory protective device.
Additional information: Cool endangered receptacles with water spray.
Trade name: Butane Fuel

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.

Environmental precautions Avoid release to the environment.

Methods and material for containment and cleaning up
Allow to evaporate.
Ensure adequate ventilation.

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

Handling
Precautions for safe handling:
Open and handle receptacle with care.
Use only in well ventilated areas.

Information about protection against explosions and fires:
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Pressurized container: May burst if heated.

Conditions for safe storage, including any incompatibilities
Requirements to be met by storerooms and receptacles:
Store in a cool location.
Use only receptacles specifically permitted for this substance/product.

Information about storage in one common storage facility: Store away from oxidizing agents.
Further information about storage conditions: Protect from heat and direct sunlight.
Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

Control parameters

Components with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>Compound</th>
<th>Limit Values</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>106-97-8 Butane</strong></td>
<td>Long-term value: 1900 mg/m³, 800 ppm</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Short-term value: 2370 mg/m³, 1000 ppm (EX)</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Short-term value: 1000 ppm (EX)</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Long-term value: 800 ppm revoked as of 01/01/18</td>
</tr>
<tr>
<td>LMPE (Mexico)</td>
<td>Long-term value: 1000 ppm</td>
</tr>
</tbody>
</table>

75-28-5 Isobutane
Trade name: Butane Fuel

<table>
<thead>
<tr>
<th>TLV (USA)</th>
<th>Short-term value: 2370 mg/m³, 1000 ppm (EX)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL (Canada)</td>
<td>Short-term value: 1000 ppm EX</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Long-term value: 800 ppm revoked as of 01/01/18</td>
</tr>
<tr>
<td>LMPE (Mexico)</td>
<td>Long-term value: 1000 ppm</td>
</tr>
</tbody>
</table>

74-98-6 Propane

<table>
<thead>
<tr>
<th>PEL (USA)</th>
<th>Long-term value: 1800 mg/m³, 1000 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>REL (USA)</td>
<td>Long-term value: 1800 mg/m³, 1000 ppm</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>refer to Appendix F in TLVs &amp; BEIs book; D, EX</td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>Simple asphyxiant; EX</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Long-term value: 1,000 ppm revoked as of 01/01/18</td>
</tr>
<tr>
<td>LMPE (Mexico)</td>
<td>Long-term value: 1000 ppm</td>
</tr>
</tbody>
</table>

Exposure controls

General protective and hygienic measures: Wash hands before breaks and at the end of work.
Engineering controls: No relevant information available.
Breathing equipment: Use suitable respiratory protective device in case of insufficient ventilation.
Protection of hands:
Wear protective gloves to handle contents of damaged or leaking units.
Protection may be required for spills.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Eye protection:

Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.
Body protection: Protective work clothing

9 Physical and chemical properties

Information on basic physical and chemical properties

Appearance:
Form: Compressed liquefied gas
Color: Colorless
Odor: Like rotten eggs (mercaptans)
Odor threshold: Not determined.

pH-value: Not determined.
Melting point/Melting range: Not determined.
Boiling point/Boiling range: -11 ºC (12.2 ºF)
Flash point: < 0 ºC (<32 ºF)
Flammability (solid, gaseous): Not determined.
Trade name: Butane Fuel

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto-ignition temperature</td>
<td>365 °C (689 °F)</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Danger of explosion</td>
<td>Product is not explosive. However, formation of explosive air/vapor mixtures are possible.</td>
</tr>
<tr>
<td>Explosion limits</td>
<td></td>
</tr>
<tr>
<td>Lower:</td>
<td>1.5 Vol %</td>
</tr>
<tr>
<td>Upper:</td>
<td>8.5 Vol %</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapor pressure at 20 °C (68 °F):</td>
<td>3000 hPa (2250.2 mm Hg)</td>
</tr>
<tr>
<td>Density at 20 °C (68 °F):</td>
<td>0.55 g/cm³ (4.59 lbs/gal)</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Solubility in / Miscibility with Water</td>
<td>Not miscible or difficult to mix.</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Viscosity</td>
<td></td>
</tr>
<tr>
<td>Dynamic:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Kinematic:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Other information</td>
<td>No relevant information available.</td>
</tr>
</tbody>
</table>

10 Stability and reactivity

**Reactivity**: No relevant information available.

**Chemical stability**:

**Thermal decomposition / conditions to be avoided**: Contains gas under pressure; may explode if heated.

**Possibility of hazardous reactions**

Extremely flammable gas.

Reacts with oxidizing agents.

**Conditions to avoid** Excessive heat and contact with oxidizers.

**Incompatible materials** Oxidizers

**Hazardous decomposition products** Carbon monoxide

11 Toxicological information

**Information on toxicological effects**

**Acute toxicity**: Based on available data, the classification criteria are not met.

**LD/LC50 values that are relevant for classification**: None.

**Primary irritant effect**:

**On the skin**: No irritant effect.

**On the eye**: No irritating effect.
**Safety Data Sheet**

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: May 16, 2019

**Trade name:** Butane Fuel

<table>
<thead>
<tr>
<th>Sensitization:</th>
<th>No sensitizing effects known.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IARC (International Agency for Research on Cancer):</strong></td>
<td>None of the ingredients are listed.</td>
</tr>
<tr>
<td><strong>NTP (National Toxicology Program):</strong></td>
<td>None of the ingredients are listed.</td>
</tr>
<tr>
<td><strong>OSHA-Ca (Occupational Safety &amp; Health Administration):</strong></td>
<td>None of the ingredients are listed.</td>
</tr>
</tbody>
</table>

**Probable route(s) of exposure:**
- Inhalation.
- Eye contact.
- Skin contact.

**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.

## 12 Ecological information

**Toxicity**
- **Aquatic toxicity** No relevant information available.
- **Persistence and degradability** No relevant information available.
- **Bioaccumulative potential:** No relevant information available.
- **Mobility in soil:** No relevant information available.

**Additional ecological information**

**General notes:** Generally not hazardous for water.

**Other adverse effects** No relevant information available.

## 13 Disposal considerations

**Waste treatment methods**

**Recommendation:**
Contact waste processors for recycling information.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

**Uncleaned packagings**

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

## 14 Transport information

**UN-Number**

(Contd. of page 5)
Trade name: Butane Fuel

<table>
<thead>
<tr>
<th>DOT, ADR/RID/ADN, IMDG, IATA</th>
<th>UN1075</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>PETROLEUM GASES, LIQUEFIED</td>
</tr>
</tbody>
</table>

### Transport hazard class(es)

#### DOT

- **Class**: 2.1
- **Label**: 2.1

#### ADR/RID/ADN

- **Class**: 2 2F
- **Label**: 2.1

#### IMDG, IATA

- **Class**: 2.1
- **Label**: 2.1

### Packing group

This UN-number is not assigned a packing group.

### Environmental hazards

**Marine pollutant**: No

### Special precautions for user

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

### Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

### IATA

**Cargo Aircraft Only.**

### 15 Regulatory information
### Safety Data Sheet

**Trade name:** Butane Fuel

(Cont'd. of page 7)

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

**United States (USA)**

**SARA**

**Section 302 (extremely hazardous substances):**

None of the ingredients are listed.

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

None of the ingredients are listed.

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

None of the ingredients are listed.

**TSCA (Toxic Substances Control Act)**

All ingredients are listed or exempt.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**

<table>
<thead>
<tr>
<th>106-97-8</th>
<th>Butane</th>
<th>10000</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-28-5</td>
<td>Isobutane</td>
<td>10000</td>
</tr>
<tr>
<td>74-98-6</td>
<td>Propane</td>
<td>10000</td>
</tr>
</tbody>
</table>

**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 are listed.

**Chemicals known to cause developmental toxicity for females:**

None of the ingredients are listed.

**Chemicals known to cause developmental toxicity for males:**

None of the ingredients are listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

**EPA (Environmental Protection Agency):**

None of the ingredients are listed.

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

None of the ingredients are listed.

**Canadian Domestic Substances List (DSL): (Substances not listed.)**

All ingredients are listed.

### 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.

**Abbreviations and acronyms:**

(Cont'd. on page 9)
Trade name: Butane Fuel

ADR: 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
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
OSHA: Occupational Safety & Health Administration
Flam. Gas 1: Flammable gases – Category 1
Press. Gas: Gases under pressure – Compressed gas
Press. Gas: Gases under pressure – Liquefied gas

Sources
Website, European Chemicals Agency (echa.europa.eu)
Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)
Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)
Safety Data Sheets, Individual Manufacturers
SDS Prepared by:
ChemTel Inc.
1305 North Florida Avenue
Tampa, Florida USA 33602-2902
Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573
Website: www.chemtelinc.com