

Safety Data Sheet

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

Revision: May 16, 2019

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)248-0585 (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

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Components:

106-97-8	Butane	 Flam. Gas 1, H220  Press. Gas, H280 Simple Asphyxiant	60-80%
75-28-5	Isobutane	 Flam. Gas 1, H220  Press. Gas, H280 Simple Asphyxiant	20-40%
74-98-6	Propane	 Flam. Gas 1, H220  Press. Gas, H280 Simple Asphyxiant	<5%

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.

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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:**

106-97-8 Butane

REL (USA)	Long-term value: 1900 mg/m ³ , 800 ppm
TLV (USA)	Short-term value: 2370 mg/m ³ , 1000 ppm (EX)
EL (Canada)	Short-term value: 1000 ppm EX
EV (Canada)	Long-term value: 800 ppm revoked as of 01/01/18
LMPE (Mexico)	Long-term value: 1000 ppm

75-28-5 Isobutane

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TLV (USA)	Short-term value: 2370 mg/m ³ , 1000 ppm (EX)
EL (Canada)	Short-term value: 1000 ppm EX
EV (Canada)	Long-term value: 800 ppm revoked as of 01/01/18
LMPE (Mexico)	Long-term value: 1000 ppm
74-98-6 Propane	
PEL (USA)	Long-term value: 1800 mg/m ³ , 1000 ppm
REL (USA)	Long-term value: 1800 mg/m ³ , 1000 ppm
TLV (USA)	refer to Appendix F in TLVs&BEIs book; D, EX
EL (Canada)	Simple asphyxiant; EX
EV (Canada)	Long-term value: 1,000 ppm revoked as of 01/01/18
LMPE (Mexico)	Long-term value: 1000 ppm

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 °C (12.2 °F)
- **Flash point:** < 0 °C (<32 °F)
- **Flammability (solid, gaseous):** Not determined.

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· Auto-ignition temperature:	365 °C (689 °F)
· Decomposition temperature:	Not determined.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits Lower:	1.5 Vol %
Upper:	8.5 Vol %
· Oxidizing properties:	Not determined.
· Vapor pressure at 20 °C (68 °F):	3000 hPa (2250.2 mm Hg)
· Density at 20 °C (68 °F):	0.55 g/cm ³ (4.59 lbs/gal)
· Relative density:	Not determined.
· Vapor 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.
· Other information	No relevant information available.

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.

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- **Sensitization:** No sensitizing effects known.

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

None of the ingredients are listed.

- **NTP (National Toxicology Program):**

None of the ingredients are listed.

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

None of the ingredients are listed.

- **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**

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· DOT, ADR/RID/ADN, IMDG, IATA

UN1075

· UN proper shipping name

· DOT, ADR/RID/ADN, IMDG, IATA

PETROLEUM GASES, LIQUEFIED

· 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.

· Transport/Additional information:

· IATA



Cargo Aircraft Only.

15 Regulatory information

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- **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):

106-97-8	Butane	10000
75-28-5	Isobutane	10000
74-98-6	Propane	10000

· 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:

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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

SourcesWebsite, European Chemicals Agency (echa.europa.eu)Website, US EPA Substance Registry Services (ofmpub.epa.gov/sorinternet/registry/substreg/home/overview/home.do)Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaassen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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