

Safety Data Sheet

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

Printing date: September 17, 2018

Revision: September 17, 2018

1 Identification

- **Product identifier**
- **Trade name:** Ronson Butane Fuel
- **CAS Number:**
68476-86-8
- **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:**
Zippo Manufacturing Company



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:** Substances

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- **CAS No. Description**
68476-86-8 Petroleum gases, liquified, sweetened

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.
Immediately rinse with water.
If skin irritation continues, consult a doctor.
- **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.
Do not induce vomiting; immediately call for medical help.
- **Most important symptoms and effects, both acute and delayed:** No relevant information available.
- **Indication of any immediate medical attention and special treatment needed:**
Treat frost-bitten areas appropriately.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
Carbon dioxide
Gaseous extinguishing agents
Water fog / haze
Foam
- **For safety reasons unsuitable extinguishing agents:** Water stream.
- **Special hazards arising from the substance or mixture**
Extremely flammable gas.
Formation of toxic gases is possible during heating or in case of fire.
- **Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information:** Cool endangered receptacles with water spray.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation.
Keep away from ignition sources.
- **Environmental precautions**

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Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- **Methods and material for containment and cleaning up**

Allow to evaporate.

Absorb liquid components with liquid-binding material.

- **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:** Use only in well ventilated areas.

- **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

Protect from heat.

Protect against electrostatic charges.

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

- **Requirements to be met by storerooms and receptacles:**

Avoid storage near extreme heat, ignition sources or open flame.

- **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:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- **Exposure controls**

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

- **Engineering controls:** Provide adequate ventilation.

- **Breathing equipment:** Use suitable respiratory protective device in case of insufficient ventilation.

- **Protection of hands:**

Not required under normal conditions of use.

Wear protective gloves to handle contents of damaged or leaking units.

- **Eye protection:** Follow relevant national guidelines concerning the use of protective eyewear.

- **Body protection:** Not required.

- **Limitation and supervision of exposure into the environment**

No relevant information available.

- **Risk management measures** No relevant information available.

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9 Physical and chemical properties

· Information on basic physical and chemical properties

· Appearance:

Form: Compressed liquefied gas

Color: Colorless

· Odor: Odorless

· Odor threshold: Not determined.

· pH-value: Not determined.

· Melting point/Melting range: Not determined.

· Boiling point/Boiling range: -24 °C (-11.2 °F)

· Flash point: -91 °C (-131.8 °F)

· Flammability (solid, gaseous): Not determined.

· Decomposition temperature: Not determined.

· Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· Explosion limits

Lower: 1.8 Vol %

Upper: 9.5 Vol %

· Vapor pressure at 21 °C (69.8 °F): 2814 hPa (2,110.7 mm Hg)

· Density:

Relative density: 0.56

Vapor density: 1.7237

Evaporation rate: Not determined.

· 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:**

No decomposition if used according to specifications.

To avoid thermal decomposition, do not overheat.

· **Possibility of hazardous reactions**

Used empty containers may contain product gases which form explosive mixtures with air.

Reacts with strong oxidizing agents.

Danger of receptacles bursting because of high vapor pressure if heated.

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Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.

- **Conditions to avoid** Excessive heat.
- **Incompatible materials** Oxidizers
- **Hazardous decomposition products** Carbon monoxide and carbon dioxide

11 Toxicological information

· Information on toxicological effects

- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:** None.
- **Primary irritant effect:**
- **On the skin:**
No irritant effect.
Contact with rapidly expanding gas may cause burns or frostbite.
Based on available data, the classification criteria are not met.
- **On the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

· IARC (International Agency for Research on Cancer):

Substance is not listed.

· NTP (National Toxicology Program):

Substance is not listed.

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

Substance is not 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:** Does not accumulate in organisms
- **Mobility in soil:** No relevant information available.

· Additional ecological information

· General notes:

Negative ecological effects are, according to the current state of knowledge, not expected.

· Results of PBT and vPvB assessment

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- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No relevant information available.

13 Disposal considerations

· Waste treatment methods

· Recommendation:

Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

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

· DOT, ADR, IMDG, IATA UN1011

· UN proper shipping name

· DOT, IATA Butane
· ADR, IMDG BUTANE

· Transport hazard class(es)

· DOT



· Class 2.1
· Label 2.1

· ADR



· Class 2.1 2F
· Label 2.1

· IMDG, IATA



· Class 2.1

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· Label	2.1
· Packing group	This UN-number is not assigned a packing group.
· Environmental hazards	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
· 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

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

- **United States (USA)**
- **SARA**

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

Substance is not listed.

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

Substance is not listed.

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

Substance is not listed.

· **TSCA (Toxic Substances Control Act)**

Substance is listed.

· **Proposition 65 (California)**

· **Chemicals known to cause cancer:**

Substance is not listed.

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

Substance is not listed.

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

Substance is not listed.

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

Substance is not listed.

· **EPA (Environmental Protection Agency):**

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Substance is not listed.

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

Substance is not listed.

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

Substance is 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:**

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

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bio-accumulable, Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Gas 1: Flammable gases – Category 1

Press. Gas: Gases under pressure – Compressed gas

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1 Identification

- **Product identifier**
- **Trade name:** Ronson Butane Fuel (Odorized)
- **CAS Number:**
68476-86-8
- **Recommended use and restriction on use**
- **Recommended use:** Fuel
- **Restrictions on use:** Contact manufacturer/supplier
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
Zippo Manufacturing Company

RONSON

2 Hazard(s) identification

- **Classification of the substance or mixture**
Flam. Gas 1 H220 Extremely flammable gas.
- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**



GHS02

- **Signal word:** Danger
- **Hazard statements:**
H220 Extremely flammable gas.
- **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.
P403 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:** Substances
- **CAS No. Description**

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Trade name: Ronson Butane Fuel (Odorized)

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68476-86-8 Petroleum gases, liquefied, sweetened

· **Impurities and stabilising additives:** Present below 0.1%: ethyl mercaptan - stenching agent.

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.

Immediately rinse with water.

If skin irritation continues, consult a doctor.

· **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.

Do not induce vomiting; immediately call for medical help.

· **Most important symptoms and effects, both acute and delayed:** No relevant information available.

· **Danger:** No relevant information available.

· **Indication of any immediate medical attention and special treatment needed:**

Treat frost-bitten areas appropriately.

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**

Extremely flammable gas.

Formation of toxic gases is possible during heating or in case of fire.

· **Advice for firefighters**

· **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

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

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

Keep away from ignition sources.

· **Environmental precautions**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **Methods and material for containment and cleaning up**

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- Allow to evaporate.
- Absorb liquid components with liquid-binding material.
- **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.
 - Keep out of reach of children.
- **Information about protection against explosions and fires:**
 - Keep ignition sources away - Do not smoke.
 - Protect from heat.
 - Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and receptacles:**
 - Avoid storage near extreme heat, ignition sources or open flame.
- **Information about storage in one common storage facility:** Store away from oxidizing agents.
- **Further information about storage conditions:**
 - Store in cool, dry conditions in well sealed receptacles.
 - 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:**
 - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Exposure controls**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Engineering controls:** Provide adequate ventilation.
- **Breathing equipment:** Use suitable respiratory protective device in case of insufficient ventilation.
- **Protection of hands:**
 - Not required under normal conditions of use.
 - Wear protective gloves to handle contents of damaged or leaking units.
- **Eye protection:** Follow relevant national guidelines concerning the use of protective eyewear.
- **Body protection:** Not required.
- **Limitation and supervision of exposure into the environment**
 - No relevant information available.
- **Risk management measures** No relevant information available.

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Trade name: Ronson Butane Fuel (Odorized)

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9 Physical and chemical properties

· Information on basic physical and chemical properties

· Appearance:

Form: Compressed liquefied gas

Color: Colorless

· Odor: Odorless

· Odor threshold: Not determined.

· pH-value: Not determined.

· Melting point/Melting range: Not determined.

· Boiling point/Boiling range: -24 °C (-11.2 °F)

· Flash point: -91 °C (-131.8 °F)

· Flammability (solid, gaseous): Not determined.

· Decomposition temperature: Not determined.

· Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· Explosion limits

Lower: 1.8 Vol %

Upper: 9.5 Vol %

· Vapor pressure at 21 °C (69.8 °F): 2814 hPa (2,110.7 mm Hg)

· Density:

Relative density: 0.56

Vapor density: 1.7237

Evaporation rate: Not determined.

· 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:**

No decomposition if used according to specifications.

To avoid thermal decomposition, do not overheat.

· **Possibility of hazardous reactions**

Used empty containers may contain product gases which form explosive mixtures with air.

Reacts with strong oxidizing agents.

Danger of receptacles bursting because of high vapor pressure if heated.

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Trade name: Ronson Butane Fuel (Odorized)

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Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.

- **Conditions to avoid** Excessive heat.
- **Incompatible materials** Oxidizers
- **Hazardous decomposition products** Carbon monoxide and carbon dioxide

11 Toxicological information

· Information on toxicological effects

- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:** None.
- **Primary irritant effect:**
- **On the skin:**
No irritant effect.
Contact with rapidly expanding gas may cause burns or frostbite.
Based on available data, the classification criteria are not met.
- **On the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer):

Substance is not listed.

· NTP (National Toxicology Program):

Substance is not listed.

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

Substance is not listed.

· Probable route(s) of exposure:

Inhalation.
Eye contact.
Skin contact.

- **Acute effects (acute toxicity, irritation and corrosivity):** No relevant information available.
- **Repeated dose toxicity:** No relevant information available.
- **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:** Does not accumulate in organisms
- **Mobility in soil:** No relevant information available.
- **Additional ecological information**

(Cont'd. on page 6)

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Trade name: Ronson Butane Fuel (Odorized)

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- **General notes:**
Negative ecological effects are, according to the current state of knowledge, not expected.
- **Other adverse effects** No relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.
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.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· **UN-Number**
· DOT, ADR, IMDG, IATA UN1011

· **UN proper shipping name**
· DOT, ADR, IMDG, IATA BUTANE

· **Transport hazard class(es)**

· DOT



· **Class** 2.1
· **Label** 2.1

· ADR



· **Class** 2.1 F1
· **Label** 2.1

· IMDG, IATA



· **Class** 2.1

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· Label	2.1
· Packing group	This UN-number is not assigned a packing group.
· DOT	II
· Environmental hazards	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
· 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

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

No relevant information available.

· **United States (USA)**

· **SARA**

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

Substance is not listed.

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

Substance is not listed.

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

Substance is not listed.

· **TSCA (Toxic Substances Control Act)**

Substance is listed.

· **Proposition 65 (California)**

· **Chemicals known to cause cancer:**

Substance is not listed.

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

Substance is not listed.

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

Substance is not listed.

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

Substance is not listed.

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· **EPA (Environmental Protection Agency):**

Substance is not listed.

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

Substance is not 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.

· **Date of preparation / last revision** June 11, 2018 / -

· **Abbreviations and acronyms:**

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

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Flam. Gas 1: Flammable gases – Category 1

Zippo Premium Butane Gas 100 ml

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Date of issue:2/3/2016 Revision date:2/3/2016 :

Version: 1.00

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

1.1. Product identifier

Trade name : Zippo Premium Butane Gas 100 ml
Vaporizer : Aerosol

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

1.2.1. Relevant identified uses

Intended for general public

Main use category : Consumer use,Professional use

Use of the substance/mixture : Gas

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

Zippo U.K. Ltd

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Aerosol, Category 1 H222;H229

Full text of hazard classes and H-statements : see section 16

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H222 - Extremely flammable aerosol
H229 - Pressurised container: May burst if heated

Precautionary statements (CLP) :

P102 - Keep out of reach of children
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P211 - Do not spray on an open flame or other ignition source
P251 - Do not pierce or burn, even after use
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

Zippo Premium Butane Gas 100 ml

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
isobutane	(CAS No) 75-28-5 (EC no) 200-857-2 (EC index no) 601-004-00-0 (REACH-no) 01-2119485395-27	>= 90	Flam. Gas 1, H220 Press. Gas
butane	(CAS No) 106-97-8 (EC no) 203-448-7 (EC index no) 601-004-00-0 (REACH-no) 01-2119474691-32	2.5 - 5	Flam. Gas 1, H220 Press. Gas
propane	(CAS No) 74-98-6 (EC no) 200-827-9 (EC index no) 601-003-00-5 (REACH-no) 01-2119486944-21	1 - 2.5	Flam. Gas 1, H220 Press. Gas

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : In case of doubt or persistent symptoms, consult always a physician.
- First-aid measures after inhalation : Move to fresh air. If you feel unwell, seek medical advice.
- First-aid measures after skin contact : Rinse skin with water/shower. If skin irritation persists, take medical advice.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Ingestion unlikely.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Headache. Nausea. Dizziness. Frostbites.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Sand. extinguishing powder.
- Unsuitable extinguishing media : Strong water jet.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Flammable gas.
- Explosion hazard : Contains gas under pressure; may explode if heated.
- Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon monoxide. Carbon dioxide. Sulphur oxides. Vapours may ignite. Vapours are heavier than air.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray to cool exposed surfaces.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Self-contained breathing apparatus.
- Other information : Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Ensure adequate air ventilation. Avoid contact with skin and eyes. Remove all sources of ignition.

6.1.1. For non-emergency personnel

- Protective equipment : Concerning personal protective equipment to use, see section 8.

Zippo Premium Butane Gas 100 ml

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

6.1.2. For emergency responders

Protective equipment : Concerning personal protective equipment to use, see section 8.

6.2. Environmental precautions

No special environmental precautions required.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : If possible, allow spill to evaporate under surveillance.

6.4. Reference to other sections

Information for safe handling. See Heading 7. Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Handle and open container with care. Use only in well ventilated areas. Keep away from sources of ignition - No smoking. Avoid the build-up of electrostatic charge.

Hygiene measures : Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Keep away from heat and direct sunlight. Store always product in container of same material as original container.

Incompatible products : Oxidizing agent.

Prohibitions on mixed storage : Keep away from strong oxidizers. Keep away from food, drink and animal feeding stuffs. Do not store with: Oxidizing materials.

7.3. Specific end use(s)

No additional information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

butane (106-97-8)		
United Kingdom	Local name	Butane
United Kingdom	WEL TWA (mg/m ³)	1450 mg/m ³
United Kingdom	WEL TWA (ppm)	600 ppm
United Kingdom	WEL STEL (mg/m ³)	1810 mg/m ³
United Kingdom	WEL STEL (ppm)	750 ppm
United Kingdom	Remark (WEL)	Carc (Capable of causing cancer and/or heritable genetic damage. See paragraphs 49–51), (only applies if Butane contains more than 0.1% of buta-1,3-diene)

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Hand protection : Not required

Eye protection : Not required

Respiratory protection : Accidental release measures. Breathing apparatus with filter. Filter AX (brown)

Other information : Wash hands before breaks and after work. Do not breathe gas/vapour/aerosol. Avoid contact with skin and eyes. Precautions manipulation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Aerosol
Colour : colourless.
Odour : No data available
Odour threshold : Not determined
pH : Not specifically applicable
Relative evaporation rate (butylacetate=1) : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : -11.7 °C
Flash point : -60 °C

Zippo Premium Butane Gas 100 ml

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: ≈ 460 °C (DIN 51794)
Vapour pressure	: 1.2 bar (at 20°C)
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 600 kg/m ³ (at 0°C)
Solubility	: Water: practically insoluble
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 0.2 - 12 mPa.s (at 0°C)
Explosive properties	: Product is not explosive. Can form explosive mixtures with air.
Oxidising properties	: No data available
Explosive limits	: ≈ 1.4 vol % ≈ 9.3 vol %

9.2. Other information

Other properties	: Flammable aerosol.
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SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

No decomposition if stored normally.

10.3. Possibility of hazardous reactions

Explosive vapour/air mixtures may be formed.

10.4. Conditions to avoid

heat. Direct sunlight.

10.5. Incompatible materials

Strong oxidizing agent.

10.6. Hazardous decomposition products

None under normal use.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: Not specifically applicable
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: Not specifically applicable
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (single exposure)	: Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (repeated exposure)	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)

Zippo Premium Butane Gas 100 ml

Vaporizer	Aerosol
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SECTION 12: Ecological information

12.1. Toxicity

No additional information available

Zippo Premium Butane Gas 100 ml

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

12.2. Persistence and degradability

Zippo Premium Butane Gas 100 ml

Persistence and degradability No additional information available.

12.3. Bioaccumulative potential

Zippo Premium Butane Gas 100 ml

Bioaccumulative potential low mobility.

12.4. Mobility in soil

Zippo Premium Butane Gas 100 ml

Ecology - soil No additional information available.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available






SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.
Waste treatment methods : European waste catalogue.
Waste disposal recommendations : Avoid release to the environment. Comply with local regulations for disposal.
European List of Waste (LoW) code : 16 00 00 - WASTES NOT OTHERWISE SPECIFIED IN THE LIST
16 05 00 - gases in pressure containers and discarded chemicals
16 05 05 - gases in pressure containers other than those mentioned in 16 05 04

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
1057	1057	1057	1057	1057
14.2. UN proper shipping name				
LIGHTER REFILLS	LIGHTER REFILLS	Lighter refills	LIGHTER REFILLS	LIGHTER REFILLS
Transport document description				
UN 1057 LIGHTER REFILLS, 2.1, (D)	UN 1057 LIGHTER REFILLS, 2.1	Lighter refills	LIGHTER REFILLS	LIGHTER REFILLS
14.3. Transport hazard class(es)				
2.1	2.1	2.1	2.1	2.1
				
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : 6F
Special provisions (ADR) : 201, 654, 658
Limited quantities (ADR) : 0
Excepted quantities (ADR) : E0
Transport category (ADR) : 2
Tunnel restriction code (ADR) : D

Zippo Premium Butane Gas 100 ml

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

- Transport by sea

Special provisions (IMDG)	: 201
Limited quantities (IMDG)	: 0
Excepted quantities (IMDG)	: E0
EmS-No. (Fire)	: F-D
EmS-No. (Spillage)	: S-U
Stowage category (IMDG)	: B
Flash point (IMDG)	: - 60 °C
Properties and observations (IMDG)	: Lighters or lighter refills containing butane or other flammable gas.
MFAG-No	: 115

- Air transport

PCA Excepted quantities (IATA)	: E0
PCA Limited quantities (IATA)	: Forbidden
PCA limited quantity max net quantity (IATA)	: Forbidden
PCA packing instructions (IATA)	: 201
PCA max net quantity (IATA)	: 1kg
CAO packing instructions (IATA)	: 201
CAO max net quantity (IATA)	: 15kg
ERG code (IATA)	: 10L

- Inland waterway transport

Classification code (ADN)	: 6F
Special provisions (ADN)	: 201, 654, 658
Limited quantities (ADN)	: 0
Excepted quantities (ADN)	: E0

- Rail transport

Classification code (RID)	: 6F
Special provisions (RID)	: 201, 654, 658
Limited quantities (RID)	: 0
Excepted quantities (RID)	: E0
Transport category (RID)	: 2
Hazard identification number (RID)	: 23

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

IBC code	: Not applicable.
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SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Seveso Information	: P3a FLAMMABLE AEROSOLS 'Flammable' aerosols Category 1 or 2, containing flammable gases Category 1 or 2 or flammable liquids Category 1
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15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources	: 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. ECHA (European Chemicals Agency).
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Zippo Premium Butane Gas 100 ml

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Department issuing data specification sheet: : KFT Chemieservice GmbH

Full text of H- and EUH-statements:

Aerosol 1	Aerosol, Category 1
Flam. Gas 1	Flammable gases, Category 1
Press. Gas	Gases under pressure
H220	Extremely flammable gas
H222	Extremely flammable aerosol
H229	Pressurised container: May burst if heated

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Aerosol 1	H222;H229	Auf der Basis von Prüfdaten
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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

Zippo Premium Butane Gas 100 ml

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Date of issue:2/3/2016 Revision date:2/3/2016 :

Version: 1.00

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

1.1. Product identifier

Trade name : Zippo Premium Butane Gas 100 ml
Vaporizer : Aerosol

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

1.2.1. Relevant identified uses

Intended for general public

Main use category : Consumer use, Professional use

Use of the substance/mixture : Gas

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier
Zippo GmbH

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Aerosol, Category 1 H222;H229

Full text of hazard classes and H-statements : see section 16

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

Signal word (CLP) : Danger

Hazard statements (CLP) : H222 - Extremely flammable aerosol
H229 - Pressurised container: May burst if heated

Precautionary statements (CLP) : P102 - Keep out of reach of children
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P211 - Do not spray on an open flame or other ignition source
P251 - Do not pierce or burn, even after use
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Zippo Premium Butane Gas 100 ml

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
isobutane	(CAS No) 75-28-5 (EC no) 200-857-2 (EC index no) 601-004-00-0 (REACH-no) 01-2119485395-27	>= 90	Flam. Gas 1, H220 Press. Gas
butane	(CAS No) 106-97-8 (EC no) 203-448-7 (EC index no) 601-004-00-0 (REACH-no) 01-2119474691-32	2.5 - 5	Flam. Gas 1, H220 Press. Gas
propane	(CAS No) 74-98-6 (EC no) 200-827-9 (EC index no) 601-003-00-5 (REACH-no) 01-2119486944-21	1 - 2.5	Flam. Gas 1, H220 Press. Gas

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : In case of doubt or persistent symptoms, consult always a physician.
First-aid measures after inhalation : Move to fresh air. If you feel unwell, seek medical advice.
First-aid measures after skin contact : Rinse skin with water/shower. If skin irritation persists, take medical advice.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Ingestion unlikely.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Headache. Nausea. Dizziness. Frostbites.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Sand. extinguishing powder.
Unsuitable extinguishing media : Strong water jet.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Flammable gas.
Explosion hazard : Contains gas under pressure; may explode if heated.
Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon monoxide. Carbon dioxide. Sulphur oxides. Vapours may ignite. Vapours are heavier than air.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray to cool exposed surfaces.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Self-contained breathing apparatus.
Other information : Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Ensure adequate air ventilation. Avoid contact with skin and eyes. Remove all sources of ignition.

6.1.1. For non-emergency personnel

- Protective equipment : Concerning personal protective equipment to use, see section 8.

6.1.2. For emergency responders

- Protective equipment : Concerning personal protective equipment to use, see section 8.

6.2. Environmental precautions

No special environmental precautions required.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : If possible, allow spill to evaporate under surveillance.

Zippo Premium Butane Gas 100 ml

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

6.4. Reference to other sections

Information for safe handling. See Heading 7. Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid contact with skin and eyes. Handle and open container with care. Use only in well ventilated areas. Keep away from sources of ignition - No smoking. Avoid the build-up of electrostatic charge.
- Hygiene measures : Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Keep away from heat and direct sunlight. Store always product in container of same material as original container.
- Incompatible products : Oxidizing agent.
- Prohibitions on mixed storage : Keep away from strong oxidizers. Keep away from food, drink and animal feeding stuffs. Do not store with: Oxidizing materials.

7.3. Specific end use(s)

No additional information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

butane (106-97-8)		
United Kingdom	Local name	Butane
United Kingdom	WEL TWA (mg/m ³)	1450 mg/m ³
United Kingdom	WEL TWA (ppm)	600 ppm
United Kingdom	WEL STEL (mg/m ³)	1810 mg/m ³
United Kingdom	WEL STEL (ppm)	750 ppm
United Kingdom	Remark (WEL)	Carc (Capable of causing cancer and/or heritable genetic damage. See paragraphs 49–51), (only applies if Butane contains more than 0.1% of buta-1,3-diene)

8.2. Exposure controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Hand protection : Not required
- Eye protection : Not required
- Respiratory protection : Accidental release measures. Breathing apparatus with filter. Filter AX (brown)
- Other information : Wash hands before breaks and after work. Do not breathe gas/vapour/aerosol. Avoid contact with skin and eyes. Precautions manipulation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Aerosol
- Colour : colourless.
- Odour : No data available
- Odour threshold : Not determined
- pH : Not specifically applicable
- Relative evaporation rate (butylacetate=1) : No data available
- Melting point : No data available
- Freezing point : No data available
- Boiling point : -11.7 °C
- Flash point : -60 °C
- Auto-ignition temperature : No data available
- Decomposition temperature : No data available
- Flammability (solid, gas) : ≈ 460 °C (DIN 51794)
- Vapour pressure : 1.2 bar (at 20°C)
- Relative vapour density at 20 °C : No data available
- Relative density : No data available

Zippo Premium Butane Gas 100 ml

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Density	: 600 kg/m ³ (at 0°C)
Solubility	: Water: practically insoluble
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 0.2 - 12 mPa.s (at 0°C)
Explosive properties	: Product is not explosive. Can form explosive mixtures with air.
Oxidising properties	: No data available
Explosive limits	: ≈ 1.4 vol % ≈ 9.3 vol %

9.2. Other information

Other properties : Flammable aerosol.

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

No decomposition if stored normally.

10.3. Possibility of hazardous reactions

Explosive vapour/air mixtures may be formed.

10.4. Conditions to avoid

heat. Direct sunlight.

10.5. Incompatible materials

Strong oxidizing agent.

10.6. Hazardous decomposition products

None under normal use.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: Not specifically applicable
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: Not specifically applicable
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (single exposure)	: Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity (repeated exposure)	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)

Zippo Premium Butane Gas 100 ml

Vaporizer	Aerosol
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SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

Zippo Premium Butane Gas 100 ml

Persistence and degradability	No additional information available.
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12.3. Bioaccumulative potential

Zippo Premium Butane Gas 100 ml

Bioaccumulative potential	low mobility.
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Zippo Premium Butane Gas 100 ml

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

12.4. Mobility in soil

Zippo Premium Butane Gas 100 ml

Ecology - soil : No additional information available.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available






SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.
Waste treatment methods : European waste catalogue.
Waste disposal recommendations : Avoid release to the environment. Comply with local regulations for disposal.
European List of Waste (LoW) code : 16 00 00 - WASTES NOT OTHERWISE SPECIFIED IN THE LIST
16 05 00 - gases in pressure containers and discarded chemicals
16 05 05 - gases in pressure containers other than those mentioned in 16 05 04

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
1057	1057	1057	1057	1057
14.2. UN proper shipping name				
LIGHTER REFILLS	LIGHTER REFILLS	Lighter refills	LIGHTER REFILLS	LIGHTER REFILLS
Transport document description				
UN 1057 LIGHTER REFILLS, 2.1, (D)	UN 1057 LIGHTER REFILLS, 2.1	Lighter refills	LIGHTER REFILLS	LIGHTER REFILLS
14.3. Transport hazard class(es)				
2.1	2.1	2.1	2.1	2.1
				
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : 6F
Special provisions (ADR) : 201, 654, 658
Limited quantities (ADR) : 0
Excepted quantities (ADR) : E0
Transport category (ADR) : 2
Tunnel restriction code (ADR) : D

- Transport by sea

Special provisions (IMDG) : 201
Limited quantities (IMDG) : 0
Excepted quantities (IMDG) : E0
EmS-No. (Fire) : F-D
EmS-No. (Spillage) : S-U
Stowage category (IMDG) : B
Flash point (IMDG) : - 60 °C

Zippo Premium Butane Gas 100 ml

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Properties and observations (IMDG) : Lighters or lighter refills containing butane or other flammable gas.
MFAG-No : 115

- Air transport

PCA Excepted quantities (IATA) : E0
PCA Limited quantities (IATA) : Forbidden
PCA limited quantity max net quantity (IATA) : Forbidden
PCA packing instructions (IATA) : 201
PCA max net quantity (IATA) : 1kg
CAO packing instructions (IATA) : 201
CAO max net quantity (IATA) : 15kg
ERG code (IATA) : 10L

- Inland waterway transport

Classification code (ADN) : 6F
Special provisions (ADN) : 201, 654, 658
Limited quantities (ADN) : 0
Excepted quantities (ADN) : E0

- Rail transport

Classification code (RID) : 6F
Special provisions (RID) : 201, 654, 658
Limited quantities (RID) : 0
Excepted quantities (RID) : E0
Transport category (RID) : 2
Hazard identification number (RID) : 23

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

IBC code : Not applicable.

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

Seveso Information : P3a FLAMMABLE AEROSOLS
'Flammable' aerosols Category 1 or 2, containing flammable gases Category 1 or 2 or flammable liquids Category 1

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources : 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. ECHA (European Chemicals Agency).

Department issuing data specification sheet: : KFT Chemieservice GmbH

Contact person

Full text of H- and EUH-statements:

Aerosol 1	Aerosol, Category 1
Flam. Gas 1	Flammable gases, Category 1

Zippo Premium Butane Gas 100 ml

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Press. Gas	Gases under pressure
H220	Extremely flammable gas
H222	Extremely flammable aerosol
H229	Pressurised container: May burst if heated

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Aerosol 1	H222;H229	Auf der Basis von Prüfdaten
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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

Safety Data Sheet

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

Printing date: September 17, 2018

Revision: September 17, 2018

1 Identification

- **Product identifier**
- **Trade name:** Zippo Butane Fuel
- **CAS Number:**
68476-86-8
- **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:**
Zippo Manufacturing Company



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:**
Two diamond-shaped hazard pictograms are shown side-by-side. The first, GHS02, depicts a flame. The second, GHS04, depicts a gas cylinder with a flame at the top.
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:** Substances

(Cont'd. on page 2)

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Trade name: Zippo Butane Fuel

(Cont'd. of page 1)

- **CAS No. Description**
68476-86-8 Petroleum gases, liquified, sweetened

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.
Immediately rinse with water.
If skin irritation continues, consult a doctor.
- **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.
Do not induce vomiting; immediately call for medical help.
- **Most important symptoms and effects, both acute and delayed:** No relevant information available.
- **Indication of any immediate medical attention and special treatment needed:**
Treat frost-bitten areas appropriately.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
Carbon dioxide
Gaseous extinguishing agents
Water fog / haze
Foam
- **For safety reasons unsuitable extinguishing agents:** Water stream.
- **Special hazards arising from the substance or mixture**
Extremely flammable gas.
Formation of toxic gases is possible during heating or in case of fire.
- **Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information:** Cool endangered receptacles with water spray.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation.
Keep away from ignition sources.
- **Environmental precautions**

(Cont'd. on page 3)

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(Cont'd. of page 2)

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- **Methods and material for containment and cleaning up**

Allow to evaporate.

Absorb liquid components with liquid-binding material.

- **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:** Use only in well ventilated areas.

- **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

Protect from heat.

Protect against electrostatic charges.

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

- **Requirements to be met by storerooms and receptacles:**

Avoid storage near extreme heat, ignition sources or open flame.

- **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:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- **Exposure controls**

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

- **Engineering controls:** Provide adequate ventilation.

- **Breathing equipment:** Use suitable respiratory protective device in case of insufficient ventilation.

- **Protection of hands:**

Not required under normal conditions of use.

Wear protective gloves to handle contents of damaged or leaking units.

- **Eye protection:** Follow relevant national guidelines concerning the use of protective eyewear.

- **Body protection:** Not required.

- **Limitation and supervision of exposure into the environment**

No relevant information available.

- **Risk management measures** No relevant information available.

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Trade name: Zippo Butane Fuel

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9 Physical and chemical properties

· Information on basic physical and chemical properties

· Appearance:

Form: Compressed liquefied gas

Color: Colorless

· Odor: Odorless

· Odor threshold: Not determined.

· pH-value: Not determined.

· Melting point/Melting range: Not determined.

· Boiling point/Boiling range: -24 °C (-11.2 °F)

· Flash point: -91 °C (-131.8 °F)

· Flammability (solid, gaseous): Not determined.

· Decomposition temperature: Not determined.

· Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· Explosion limits

Lower: 1.8 Vol %

Upper: 9.5 Vol %

· Vapor pressure at 21 °C (69.8 °F): 2814 hPa (2,110.7 mm Hg)

· Density:

Relative density: 0.56

Vapor density: 1.7237

Evaporation rate: Not determined.

· 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:**

No decomposition if used according to specifications.

To avoid thermal decomposition, do not overheat.

· **Possibility of hazardous reactions**

Used empty containers may contain product gases which form explosive mixtures with air.

Reacts with strong oxidizing agents.

Danger of receptacles bursting because of high vapor pressure if heated.

(Cont'd. on page 5)

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- Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.
- **Conditions to avoid** Excessive heat.
- **Incompatible materials** Oxidizers
- **Hazardous decomposition products** Carbon monoxide and carbon dioxide

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:** None.
- **Primary irritant effect:**
- **On the skin:**
No irritant effect.
Contact with rapidly expanding gas may cause burns or frostbite.
Based on available data, the classification criteria are not met.
- **On the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

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

Substance is not listed.

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

Substance is not listed.

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

Substance is not 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:** Does not accumulate in organisms
- **Mobility in soil:** No relevant information available.
- **Additional ecological information**
- **General notes:**
Negative ecological effects are, according to the current state of knowledge, not expected.
- **Results of PBT and vPvB assessment**

(Cont'd. on page 6)

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- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No relevant information available.

13 Disposal considerations

· Waste treatment methods

· Recommendation:

Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

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

· DOT, ADR, IMDG, IATA UN1011

· UN proper shipping name

· DOT, IATA Butane
· ADR, IMDG BUTANE

· Transport hazard class(es)

· DOT



· Class 2.1
· Label 2.1

· ADR



· Class 2.1 2F
· Label 2.1

· IMDG, IATA



· Class 2.1

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Trade name: Zippo Butane Fuel

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· Label	2.1
· Packing group	This UN-number is not assigned a packing group.
· Environmental hazards	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
· 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

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

· **United States (USA)**

· **SARA**

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

Substance is not listed.

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

Substance is not listed.

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

Substance is not listed.

· **TSCA (Toxic Substances Control Act)**

Substance is listed.

· **Proposition 65 (California)**

· **Chemicals known to cause cancer:**

Substance is not listed.

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

Substance is not listed.

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

Substance is not listed.

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

Substance is not listed.

· **EPA (Environmental Protection Agency):**

(Cont'd. on page 8)

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Trade name: Zippo Butane Fuel

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Substance is not listed.

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

Substance is not listed.

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

Substance is 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:**

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

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bio-accumulable, Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Gas 1: Flammable gases – Category 1

Press. Gas: Gases under pressure – Compressed gas

Safety Data Sheet

Acc. to OSHA HCS (29 CFR 1910.1200)

Printing date: June 11, 2018

Revision: June 11, 2018

1 Identification

- **Product identifier**
- **Trade name: Zippo Butane Fuel (Odorized)**
- **CAS Number:**
68476-86-8
- **Recommended use and restriction on use**
- **Recommended use:** Fuel
- **Restrictions on use:** Contact manufacturer/supplier
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
Zippo Manufacturing Company



2 Hazard(s) identification

- **Classification of the substance or mixture**
Flam. Gas 1 H220 Extremely flammable gas.
- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**



GHS02

- **Signal word:** Danger
- **Hazard statements:**
H220 Extremely flammable gas.
- **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.
P403 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: Substances**
- **CAS No. Description**

(Cont'd. on page 2)

Safety Data Sheet

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Trade name: Zippo Butane Fuel (Odorized)

(Cont'd. of page 1)

68476-86-8 Petroleum gases, liquefied, sweetened

· **Impurities and stabilising additives:** Present below 0.1%: ethyl mercaptan - stenching agent.

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.

Immediately rinse with water.

If skin irritation continues, consult a doctor.

· **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.

Do not induce vomiting; immediately call for medical help.

· **Most important symptoms and effects, both acute and delayed:** No relevant information available.

· **Danger:** No relevant information available.

· **Indication of any immediate medical attention and special treatment needed:**

Treat frost-bitten areas appropriately.

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**

Extremely flammable gas.

Formation of toxic gases is possible during heating or in case of fire.

· **Advice for firefighters**

· **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

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

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

Keep away from ignition sources.

· **Environmental precautions**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **Methods and material for containment and cleaning up**

(Cont'd. on page 3)

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Trade name: Zippo Butane Fuel (Odorized)

(Cont'd. of page 2)

- Allow to evaporate.
- Absorb liquid components with liquid-binding material.
- **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.
 - Keep out of reach of children.
- **Information about protection against explosions and fires:**
 - Keep ignition sources away - Do not smoke.
 - Protect from heat.
 - Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and receptacles:**
 - Avoid storage near extreme heat, ignition sources or open flame.
- **Information about storage in one common storage facility:** Store away from oxidizing agents.
- **Further information about storage conditions:**
 - Store in cool, dry conditions in well sealed receptacles.
 - 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:**
 - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Exposure controls**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Engineering controls:** Provide adequate ventilation.
- **Breathing equipment:** Use suitable respiratory protective device in case of insufficient ventilation.
- **Protection of hands:**
 - Not required under normal conditions of use.
 - Wear protective gloves to handle contents of damaged or leaking units.
- **Eye protection:** Follow relevant national guidelines concerning the use of protective eyewear.
- **Body protection:** Not required.
- **Limitation and supervision of exposure into the environment**
 - No relevant information available.
- **Risk management measures** No relevant information available.

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Trade name: Zippo Butane Fuel (Odorized)

(Cont'd. of page 3)

9 Physical and chemical properties

· Information on basic physical and chemical properties

· Appearance:

Form: Compressed liquefied gas

Color: Colorless

· Odor: Odorless

· Odor threshold: Not determined.

· pH-value: Not determined.

· Melting point/Melting range: Not determined.

· Boiling point/Boiling range: -24 °C (-11.2 °F)

· Flash point: -91 °C (-131.8 °F)

· Flammability (solid, gaseous): Not determined.

· Decomposition temperature: Not determined.

· Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· Explosion limits

Lower: 1.8 Vol %

Upper: 9.5 Vol %

· Vapor pressure at 21 °C (69.8 °F): 2814 hPa (2,110.7 mm Hg)

· Density:

Relative density: 0.56

Vapor density: 1.7237

Evaporation rate: Not determined.

· 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:**

No decomposition if used according to specifications.

To avoid thermal decomposition, do not overheat.

· **Possibility of hazardous reactions**

Used empty containers may contain product gases which form explosive mixtures with air.

Reacts with strong oxidizing agents.

Danger of receptacles bursting because of high vapor pressure if heated.

(Cont'd. on page 5)

Safety Data Sheet

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Trade name: Zippo Butane Fuel (Odorized)

(Cont'd. of page 4)

Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.

- **Conditions to avoid** Excessive heat.
- **Incompatible materials** Oxidizers
- **Hazardous decomposition products** Carbon monoxide and carbon dioxide

11 Toxicological information

· Information on toxicological effects

- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:** None.
- **Primary irritant effect:**
- **On the skin:**
No irritant effect.
Contact with rapidly expanding gas may cause burns or frostbite.
Based on available data, the classification criteria are not met.
- **On the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer):

Substance is not listed.

· NTP (National Toxicology Program):

Substance is not listed.

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

Substance is not listed.

· Probable route(s) of exposure:

Inhalation.
Eye contact.
Skin contact.

- **Acute effects (acute toxicity, irritation and corrosivity):** No relevant information available.
- **Repeated dose toxicity:** No relevant information available.
- **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:** Does not accumulate in organisms
- **Mobility in soil:** No relevant information available.
- **Additional ecological information**

(Cont'd. on page 6)

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Trade name: Zippo Butane Fuel (Odorized)

(Cont'd. of page 5)

- **General notes:**
Negative ecological effects are, according to the current state of knowledge, not expected.
- **Other adverse effects** No relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.
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.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· **UN-Number**
· DOT, ADR, IMDG, IATA UN1011

· **UN proper shipping name**
· DOT, ADR, IMDG, IATA BUTANE

· **Transport hazard class(es)**

· DOT



· **Class** 2.1
· **Label** 2.1

· ADR



· **Class** 2.1 F1
· **Label** 2.1

· IMDG, IATA



· **Class** 2.1

(Cont'd. on page 7)

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Trade name: Zippo Butane Fuel (Odorized)

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· Label	2.1
· Packing group	This UN-number is not assigned a packing group.
· DOT	II
· Environmental hazards	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
· 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

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

No relevant information available.

- **United States (USA)**
- **SARA**

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

Substance is not listed.

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

Substance is not listed.

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

Substance is not listed.

· **TSCA (Toxic Substances Control Act)**

Substance is listed.

· **Proposition 65 (California)**

· **Chemicals known to cause cancer:**

Substance is not listed.

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

Substance is not listed.

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

Substance is not listed.

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

Substance is not listed.

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Trade name: Zippo Butane Fuel (Odorized)

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· **EPA (Environmental Protection Agency):**

Substance is not listed.

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

Substance is not 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.

· **Date of preparation / last revision** June 11, 2018 / -

· **Abbreviations and acronyms:**

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

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Flam. Gas 1: Flammable gases – Category 1