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

Printing date 6/27/2012 Revision: 1/27/2016

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

· **1.1 Product identifier**

· **Trade name: Ronson Butane**
· **CAS Number:**
68476-86-8
· **EC number:**
270-705-8
· **Index number:**
649-203-00-1

RONSON

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.

· **1.3 Details of the supplier of the Safety Data Sheet**
· **Manufacturer/Supplier:**
Zippo Manufacturing Company
33 Barbour Street
Bradford, PA 16701 USA
Phone: 814-368-2700

· **1.4 Emergency telephone number:**
ChemTel Inc.
(800)255-3924, +1 (813)248-0585

2 Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**

flame

Flam. Gas 1 H220 Extremely flammable gas.

gas cylinder

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

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

F+; Extremely flammable

R12: Extremely flammable.

Carc. Cat. 1, Muta. Cat. 2
· **Information concerning particular hazards for human and environment:** Not applicable.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.

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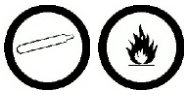
· **Hazard pictograms**

GHS02 GHS04

· **Signal word** Danger
· **Hazard statements**
H220 Extremely flammable gas.
H280 Contains gas under pressure; may explode if heated.
· **Precautionary statements**
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
P381 Eliminate all ignition sources if safe to do so.
P410+P403 Protect from sunlight. Store in a well-ventilated place.
P403 Store in a well-ventilated place.
· **Hazard description:**
· **WHMIS-symbols:**
A - Compressed gas
B1 - Flammable gas



· **NFPA ratings (scale 0 - 4)**

Health = 0
Fire = 4
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 0
Fire = 4
Reactivity = 0

· **HMIS Long Term Health Hazard Substances**
Substance is listed.

· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

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3 Composition/information on ingredients

· **3.1 Substances**
· **CAS No. Description**
68476-86-8 Petroleum gases, liquefied, sweetened
· **Identification number(s)**
· **EC number:** 270-705-8
· **Index number:** 649-203-00-1

4 First aid measures

· **4.1 Description of first aid measures**
· **After inhalation:** Supply fresh air; consult doctor in case of complaints.
· **After skin contact:**
Generally the product does not irritate the skin.
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; call for medical help immediately.
· **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:**
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **For safety reasons unsuitable extinguishing agents:** Water with full jet
· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
· **5.3 Advice for firefighters**
· **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
· **Additional information** Cool endangered receptacles with water spray.

6 Accidental release measures

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

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Ensure adequate ventilation
Keep away from ignition sources.
· **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
· **6.3 Methods and material for containment and cleaning up:** Allow to evaporate.
· **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

· **7.1 Precautions for safe handling** Open and handle receptacle with care.
· **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect from heat.
Protect against electrostatic charges.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** Store in a cool location.
· **Information about storage in one common storage facility:** 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.
· **7.3 Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

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

· **8.1 Control parameters**
· **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
· **DNELs** No further relevant information available.
· **PNECs** No further relevant information available.
· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
· **Respiratory protection:** Use suitable respiratory protective device in case of insufficient ventilation.
· **Protection of hands:** Not required.
· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

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· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:** Not required.
· **Body protection:** Not required.
· **Limitation and supervision of exposure into the environment**
No further relevant information available.
· **Risk management measures**
See Section 7 for additional information.
No further relevant information available.

9 Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**
· **General Information**
· **Appearance:**

Form:	Compressed liquefied gas
Colour:	Colourless
· **Odour:**	Odourless
· **Odour threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
Melting point/Melting range:	Not Determined.
Boiling point/Boiling range:	-24 °C
· **Flash point:**	-91 °C
· **Flammability (solid, gaseous):**	Not determined.
· **Auto/Self-ignition temperature:**	
Decomposition temperature:	Not determined.
· **Self-igniting:**	Not determined.
· **Danger of explosion:**	Product is not explosive. However, formation of explosive air/ vapour mixtures are possible.
· **Explosion limits:**	
Lower:	1,8 Vol %
Upper:	9,5 Vol %
· **Vapour pressure at 21 °C:**	2814 hPa (2110 mm Hg)(estimado))
· **Density at 20 °C:**	0,56 g/cm³
· **Relative density**	Not determined.
· **Vapour density at 20 °C**	1,7237 (aire-1,0)
· **Evaporation rate**	Not applicable.

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· **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.

· **9.2 Other information** No further relevant information available.

10 Stability and reactivity

· **10.1 Reactivity**
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
To avoid thermal decomposition do not overheat.
· **10.3 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 vapour pressure when heated.
Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomised.
· **10.4 Conditions to avoid**
Keep ignition sources away - Do not smoke.
Store away from oxidizing agents.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:** Carbon monoxide and carbon dioxide

11 Toxicological information

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

12 Ecological information

· **12.1 Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **12.2 Persistence and degradability** No further relevant information available.
· **12.3 Bioaccumulative potential** Does not accumulate in organisms.
· **12.4 Mobility in soil** No further relevant information available.

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· **Additional ecological information:**
· **General notes:**
Negative ecological effects are, according to the current state of knowledge, not expected.
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6 Other adverse effects** No further relevant information available.

13 Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation**
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.
· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.
· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

· **14.1 UN-Number**
· **DOT, ADR, IMDG, IATA** UN1011
· **14.2 UN proper shipping name**
· **DOT, IMDG, IATA** BUTANE
· **ADR** 1011 BUTANE
· **14.3 Transport hazard class(es)**

· **DOT**

· **Class** 2.1
· **Label** 2.1

· **ADR**

· **Class** 2.1 F1
· **Label** 2.1

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· **IMDG, IATA**

· **Class**	2.1
· **Label**	2.1
· **14.4 Packing group**	
· **DOT, ADR, IMDG, IATA**	Not applicable.
· **14.5 Environmental hazards:**	
· **Marine pollutant:**	No
· **14.6 Special precautions for user**	Not applicable.
· **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **ADR**	
· **Limited quantities (LQ)**	0
· **UN "Model Regulation":**	UN1011, BUTANE, 2.1

15 Regulatory information

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

· **Section 355 (extremely hazardous substances):**
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 reproductive toxicity for females:**
Substance is not listed.
· **Chemicals known to cause reproductive toxicity for males:**
Substance is not listed.
· **Chemicals known to cause developmental toxicity:**
Substance is not listed.

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· **Carcinogenic Categories**

· **EPA (Environmental Protection Agency)**
Substance is not listed.
· **IARC (International Agency for Research on Cancer)**
Substance is not listed.
· **TLV (Threshold Limit Value established by ACGIH)**
Substance is not listed.
· **NIOSH-Ca (National Institute for Occupational Safety and Health)**
Substance is not listed.
· **OSHA-Ca (Occupational Safety & Health Administration)**
Substance is not listed.

· **Canada**

· **Canadian Domestic Substances List (DSL)**
Substance is listed.
· **Canadian Ingredient Disclosure list (limit 0.1%)**
Substance is not listed.
· **Canadian Ingredient Disclosure list (limit 1%)**
Substance is not listed.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
Flam. Gas 1: Flammable gases, Hazard Category 1
Press. Gas: Gases under pressure: Compressed gas

· **Sources**
SDS Prepared by:
ChemTel Inc.
1305 North Florida Avenue
Tampa, Florida USA 33602-2902
Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573
Website: www.chemtelinc.com