

MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Ronson Multi-Fill Butane
DATE: February 17, 2010

TRADE NAME: Ronson Multi-Fill Butane
GENERAL USE: Lighter Fuel
CHEMICAL FAMILY: PARAFFIN SERIES HYDROCARBON
PRODUCT DESCRIPTION:
 CLEAR, COLORLESS, ODORLESS LIQUEFIED GAS.

RONSON®


MANUFACTURED FOR:
Zippo Manufacturing Company

DATE PREPARED: February 17, 2010
SUPERSEDES: 02/03/2010 issue.

ADDRESS (NUMBER, STREET, P.O. BOX)
 33 Barbour Street
(CITY, STATE AND ZIP CODE)
 Bradford, PA 16701

TELEPHONE NUMBER FOR INFORMATION / Customer Service
 (814) 368-2700

COUNTRY
 USA

CHEMTEL 24-HOUR EMERGENCY TELEPHONE NUMBER
 1-800-255-3924 01-813-248-0585
 North America Toll Free International

SECTION 2 - HAZARDOUS INGREDIENTS

Hazardous Components	MOL%	CAS #	EINECS #	Hazard Symbol	RISK PHRASES (Full Text Section 15)
Petroleum gases, liquefied, sweetened	100	68476-86-8	270-705-8	(+F)	R12

Notes: THIS PRODUCT IS DEFINED BY OSHA IN 29 CFR 1910.1200c AS A FLAMMABLE GAS. USE OF THIS PRODUCT MAY REQUIRE COMPLIANCE WITH 29 CFR 1910.119, PROCESS SAFETY MANAGEMENT OF HIGHLY HAZARDOUS CHEMICALS.

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Contact with evaporating liquid may cause frostbite. Under normal conditions of storage and use of this product will not constitute a health hazard. However if released, being heavier than air, this product may collect in any confined space and may reach concentrations presenting an asphyxiation or safety hazard and may be ignited by pilot lights, other flames, sparks, heaters electric motors, static discharge, or other sources of ignition.

POTENTIAL HEALTH EFFECTS

INHALATION:

Inhalation of vapor may produce anesthetic effects and feeling of euphoria. Prolonged overexposure can cause rapid breathing, headache, dizziness, narcosis, unconsciousness, or death from asphyxiation, depending upon concentration and period of exposure.

SKIN:

Direct contact of the skin with this product may cause frostbite or cold burns and containers may present a similar hazard when gas is being withdrawn, due to the cooling effect. Handling precautions should be strictly observed.

EYES:

Liquid can cause severe irritation, redness, tearing, blurred vision, and possible freeze burns.

INGESTION:

Aspiration Hazard.

CARCINOGENICITY:

NTP? No
 CALIFORNIA, Prop.65? No

IARC MONOGRAPHS? No
 ESIS?, (Europe) No

OSHA REGULATED? No

SECTION 4 - FIRST AID MEASURES

INHALATION:

Remove victim to fresh air. IF BREATHING HAS STOPPED, RESTORE BREATHING AT ONCE. Apply artificial respiration or oxygen if needed. Get medical attention immediately.

EYES:

Immediately flush eyes with water for at least 15 minutes. Get medical attention if irritation persists. CONSULT PHYSICIAN IMMEDIATELY IF FROSTBITE OCCURS.

SKIN:

For liquid contact, warm areas gradually and get medical attention. If there is evidence of tissue damage, flush area with plenty of water.


INGESTION:

Do not induce vomiting unless directed to do so by a physician or poison control center. Get immediate medical attention.

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SECTION 5 - FIRE FIGHTING MEASURES								
GENERAL HAZARDS: Highly Flammable Flash Point -132.23 to -156.0 F ,LEL=1.8% vol in air,UEL= 9.5% vol. in air.								
EXTINGUISHING MEDIA: Dry Chemical (B-C), water.								
FIRE FIGHTING PROCEDURES: Keep containers cool using water spray to avoid bursting. Evacuate area. Avoid accumulation of unburned materials. Remove personnel in general area. Observe maximum isolation when extinguishing fire. Expansion of liquid and change of state from liquid to vapor will allow combustible mixture to encompass a large area.								
UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors are heavier than air and may travel along the ground or may be moved by ventilation systems and ignited by pilot lights, open flames, sparks, heaters, smoking instruments, electric motors, static discharge, or other ignition sources at locations in proximity of the material handling point. If a fire occurs, the potential always exists for an explosion known as boiling liquid expanding vapor explosion (BLEVE)								
HAZARDOUS COMBUSTION PRODUCTS: CO, CO2 and hydrocarbons.								
SECTION 6 - ACCIDENTAL RELEASE MEASURES								
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:								
Containment Procedures Stop leak if possible. Eliminate all sources of ignition. Prevent vapor from entering sewers, basements or confined areas.								
Clean-Up Procedures Evacuate all personnel and remain upwind of leak.								
Evacuation Procedures Evacuate the area promptly. Keep upwind of the spilled material and isolate exposure.								
Special Procedures Wear appropriate personal protection equipment.								
SECTION 7 - HANDLING AND STORAGE								
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:								
Handling Procedures Avoid high temperatures that may elevate component pressure above container rating. Do not get into eyes; prevent contact with skin and clothing. Do not breathe dust. If product is placed in solution, take precautions to avoid breathing mists. When using, do not eat, drink, or smoke. Remove all contaminated clothing and wash before reuse. Wash thoroughly after handling.								
STORAGE PRECAUTIONS: Store in a cool well ventilated area. Do not store at temperatures above 120°F which may cause container to burst. Do not puncture or incinerate containers. Keep out of the reach of children. Small containers e.g. cylinders of approved design, properly sealed and in good condition, should be stored outdoors or in well ventilated storerooms, at no lower than ground level and must be quickly removable in an emergency. Eliminate all sources of ignition from the storage area.								
SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION								
HAZARDOUS COMPONENTS	NIOSH				ACGIH		OSHA	
	TWA ppm	TWA mg/m3	STEL ppm	STEL mg/m3	TLV/TWA ppm	TWA mg/m3	PEL ppm	PEL mg/m3
Petroleum gases, liquefied, sweetened	800	1900			800		800	NE
PERSONAL PROTECTION								
RESPIRATORY PROTECTION: For exposures above PEL Limits, use NIOSH or EN-149 (European) approved respirator to control exposure when TWA exceeded. Maintain adequate ventilation.								
PROTECTIVE GLOVES: Chemical resistant ,impervious, and insulated.								
EYE PROTECTION: Faceshield or Goggles.								
OTHER PROTECTIVE CLOTHING OR EQUIPMENT: VENTILATION MECHANICAL: Provide as needed to keep concentration in air below TLV and LEL. LOCAL EXHAUST: Continuous ventilation recommended. SPECIAL: Explosion proof fans and motors.								
WORK / HYGIENIC PRACTICES: Comply with state and local regulations covering liquefied petroleum gases. Comply with NFPA Pamphlet #58. Store small containers in well-ventilated areas, away from heat or sources of ignition. Prohibit smoking in areas of storage or use.								

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES			
APPEARANCE AND ODOR CLEAR, COLORLESS, ODORLESS LIQUEFIED GAS.		VAPOR PRESSURE 70 DEG F: 31 - 40 PSIG	
pH NA		SPECIFIC GRAVITY (WATER = 1) 0.56	
BOILING POINT / BOILING RANGE (-4.46 to -11.95 deg. F @ 1 ATM).		SOLUBILITY IN WATER 70 °F: 0.008%	
FLASH POINT (-132.23 to -156.0 deg. F) Closed Cup.		VISCOSITY NA	
FLAMMABLE LIMITS LEL: 1.8% Vol UEL: 9.5%Vol		VAPOR DENSITY (AIR = 1) 1.7237 - 1.952	
AUTOIGNITION TEMPERATURE VOC Content: 100%		EVAPORATION RATE Ethyl Ether = 1) >1	
SECTION 10 - STABILITY AND REACTIVITY			
STABILITY STABLE X		CONDITIONS TO AVOID: High heat, sparks, and open flames	
INCOMPATIBILITY (MATERIALS TO AVOID): Strong Oxidizers			
HAZARDOUS DECOMPOSITION OR BYPRODUCTS:		CO, Hydrocarbon Vapors.	
HAZARDOUS POLYMERIZATION: Will not occur.		CONDITIONS TO AVOID: None related to polymerization.	
SECTION 11 - TOXICOLOGICAL INFORMATION			
Hazardous Components	CAS # EINECS #	LD50 of Ingredient (Specify Species and Route)	LC50 of Ingredient (Specify Species)
No toxicological information is available for this product.			
None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.			
SECTION 12 - ECOLOGICAL INFORMATION			
No ecological data specific to this product is available ,however based on the components used in its manufacture, it is considered biodegradable. Product should not be allowed to enter sewers or other enclosed spaces or waterways.			
STATEMENT OF BIODEGRADABILITY			
The degradation of the NGL propellants does not take place by way of biological organisms. These are gases at atmospheric pressure and ambient temperature and their atmospheric life is measured in a matter of days. The degradation of the NGL propellants is accomplished via photolysis.			
SECTION 13 - DISPOSAL CONSIDERATIONS			
WASTE DISPOSAL METHOD: (1) MECHANICAL RECOVERY (2) FLARE-OFF AT SAFE LOCATION (VAPORS) (3) EXHAUST TO ATMOSPHERE IN SAFE LOCATION (NO OPEN FLAMES)			
Component Waste Numbers No EPA Waste Numbers are applicable for this product's components.			
Disposal Instructions All wastes must be handled in accordance with local, state and federal regulations. See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.			
SECTION 14 - TRANSPORT INFORMATION			
PROPER SHIPPING NAME:		PETROLEUM GASES, LIQUEFIED, 2.1, FLAMMABLE GAS, UN 1075	
DOT HAZARD CLASS / Pack Group:		2.1, FLAMMABLE GAS, UN1075	
REFERENCE:		49 CFR.	
UN / NA IDENTIFICATION NUMBER:		UN 1075	
LABEL:		LABELED / PLACARDED FLAMMABLE GAS	
HAZARD SYMBOLS:			
		IATA HAZARD CLASS / Pack Group: UN 1075 Cargo Aircraft Only 150kg max net wt. ERG code 10L ("Danger" logo required).	
		IMDG HAZARD CLASS: 2.1, FLAMMABLE GAS, UN1075 Gas Code B	
		RID/ADR Dangerous Goods Code: NE	
		UN TDG Class / Pack Group: UN 1075/Flammable Gas.	
		Hazard Identification Number (HIN): 23	
Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EU, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.			

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SECTION 15 - REGULATORY INFORMATION

TSCA (USA - Toxic Substance Control Act): Components are listed.
 SARA TITLE III (USA - Superfund Amendments and Reauthorization Act):
 Acute Health: NO
 Fire: Yes
 Chronic Health: NO
 Sudden Release of Pressure: Yes
 Reactive: NO

313 REPORTABLE INGREDIENTS: None reportable.

CERCLA (USA - Comprehensive Response Compensation and Liability Act): No RQ's Listed
 California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986: None Listed

CPR (Canadian Controlled Products Regulations): This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations. No components are listed in the WHMIS IDL.

IDL (Canadian Ingredient Disclosure List): Listed

DSL / NDSL (Canadian Domestic Substances List / Non-Domestic Substances List): Listed on DSL.

EINECS (European Inventory of Existing Commercial Chemical Substances): Referenced.

WGK Water Quality Index: 1

RISK PHRASES:	SYMBOL(S) REQUIRED FOR EU/GHS LABEL	SAFETY PHRASES:
R12: Extremely Flammable	  (+F): Extremely Flammable	S2- Keep out of the reach of children. S9-Keep container in a well ventilated place. S16- Keep away from sources of ignition -No smoking.

SECTION 16 - OTHER INFORMATION

Legend: NA=Not Applicable, NE= Not Established .

HMIS HAZARD RATINGS	HEALTH:	1	0 = INSIGNIFICANT
	FLAMMABILITY:	4	1 = SLIGHT
	PHYSICAL HAZARD:	0	2 = MODERATE
	PERSONAL PROTECTIVE EQUIPMENT:	H	3 = HIGH
			4 = EXTREME

REVISION SUMMARY:

MSDS Prepared by:
 Zippo Manufacturing Company
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 1-814-368-2700
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The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.