

# MATERIAL SAFETY DATA SHEET

Date Issued: 12/16/2011

MSDS No: LS1006

Date Revised: 08/14/2012

Revision No: 2

## Ronson® Butane Fuel Refill

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Ronson® Butane Fuel Refill**PRODUCT DESCRIPTION:** Butane Refill**PRODUCT CODE:** 99142**CHEMICAL FAMILY:** Alkane**GENERIC NAME:** Butane**MANUFACTURER**

Ortho Technology, Inc.  
17401 Commerce Park Boulevard  
Tampa, FL 33647  
**Product Stewardship:** 1-800-999-3161

**24 HR. EMERGENCY TELEPHONE NUMBERS**

CHEMTREC : 1-800-424-9300

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT(S)	CAS	Wt.%
Isobutane	75-28-5	60 - 100

See Section 8 for Exposure Limits

### 3. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW****PHYSICAL APPEARANCE:** Clear odorless gas in in aerosol container**POTENTIAL HEALTH EFFECTS****SKIN ABSORPTION:** No absorption through the skin.**INGESTION:** Product does not lend itself to ingestion.**INHALATION:** Not considered carcinogenic. Variable simple asphyxiant / anesthetic.**SIGNS AND SYMPTOMS OF OVEREXPOSURE****INHALATION:** Non toxic, but may displace oxygen in air. No apparent ill effects in breathing concentration of 5% for 2 hours. Causes drowsiness in a short time in concentrations of 1%.**ACUTE TOXICITY:** Nausea, vomiting, coughing and pulmonary irritation.**CHRONIC EFFECTS:** Dizziness, weakness, peripheral numbness and nervousness.**MEDICAL CONDITIONS AGGRAVATED:** Respiratory related chronic illnesses (i.e. asthma, etc.)**ROUTES OF ENTRY:** Inhalation only

### 4. FIRST AID MEASURES

**SKIN:** Contact with liquid can freeze tissue, similar to thermal burn. May cause frostbite.**NOTES TO PHYSICIAN:** Simple Asphyxiant / Frost Bite.

### 5. FIRE FIGHTING MEASURES

**FLASHPOINT AND METHOD:** (-120°F) Closed Cup**FLAMMABLE LIMITS:** 1.8 to 9.5

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**Notes:** In Air Volume %

**AUTOIGNITION TEMPERATURE:** Not Available

**FLAMMABLE CLASS:** Flammable gas Hazard class 2.1

**EXTINGUISHING MEDIA:** Carbon Dioxide, dry chemical, mist or water spray.

**EXPLOSION HAZARDS:** Moderate

**FIRE FIGHTING PROCEDURES:** Confine fire to immediate area; disperse liquid or vapor if spill occurs; shut off source of leak if possible.

**FIRE EXPLOSION:** Fire hazard - dangerous

**HAZARDOUS DECOMPOSITION PRODUCTS:** None except asphyxiation by displacement.

### 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Remove all ignition sources. If applicable stop leak. Disperse vapors with water spray. No smoking, flames or flares in hazard area. Isolate hazard area and deny entry of non qualified emergency response personnel.

### 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** Product is highly flammable and forms explosive mixtures with air, oxygen and all oxidizing agents. Avoid high temperatures that may elevate component pressure above container rating. Use and store this product with adequate ventilation; Use non sparking tools; electrically ground all equipment and lines; use explosion proof equipment (Class I group D, Division 1 & 2)

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### EXPOSURE GUIDELINES

HAZARDOUS COMPONENTS					
		EXPOSURE LIMITS			
		OSHA PEL		ACGIH TLV	
Chemical Name		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Isobutane	TWA	N/A	N/A	800 ppm	N/A

**ENGINEERING CONTROLS:** Ventilation: Local exhaust to meet exposure limits Class I Group D, Division 1 & 2 (NEC)

#### PERSONAL PROTECTIVE EQUIPMENT

**SKIN:** Gloves: Impermeable type - nitrile rubber.

**RESPIRATORY:** None

**PROTECTIVE CLOTHING:** To prevent repeated or prolonged skin contact, wear impervious clothing.

**WORK HYGIENIC PRACTICES:** Availability of eyewash and safety shower station recommended.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Clear odorless gas

**VAPOR PRESSURE:** 31 psig @ 70F

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**VAPOR DENSITY:** 2.0068 (Air =1)**BOILING POINT:** @ 1 ATM 10.90F**MELTING POINT:** NA = Not Applicable**POUR POINT:** NA = Not Applicable**SOLUBILITY IN WATER:** Slight**EVAPORATION RATE:** (Butyl Acetate = 1) NA = Not Applicable**SPECIFIC GRAVITY:** (H2O = 1) 0.5624**(VOC):** 100.000 %

### 10. STABILITY AND REACTIVITY

**STABILITY:** Stable.**POLYMERIZATION:** Will not occur**HAZARDOUS DECOMPOSITION PRODUCTS:** None except asphyxiation by displacement.**INCOMPATIBLE MATERIALS:** Reacts vigorously with oxidizing materials

### 11. TOXICOLOGICAL INFORMATION

#### ACUTE

**INHALATION LC<sub>50</sub>:** 52 Vol % in Air**NOTES:** Acute Inhalation of Isobutane:LC<sub>0</sub> 32 Vol % in AirLC<sub>100</sub> 65 Vol % in Air

Animal : Laboratory Rats

**TERATOGENIC EFFECTS:** Teratogenic Studies

Modified Ames Test

Isobutane not teratogenic under test conditions, six-hour exposure, followed by incubation for 42 additional Hours before scoring.

**GENERAL COMMENTS:** Caradic Arrhythmia due to Inhalation of Isobutane:

Concentration Threshold 10 + 20 Vol %

Animal : monkey, mice, dogs

Concentration to produce cardiac arrest - Not determined (cardiac arrest will occur with total exposure and oxygen deprivation.)

**COMMENTS:** Non toxic, but may displace oxygen in air.

### 12. ECOLOGICAL INFORMATION

**COMMENTS:** Not Available

### 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Dispose in accordance with local, state, and federal regulations.

### 14. TRANSPORT INFORMATION

**DOT (DEPARTMENT OF TRANSPORTATION)****PROPER SHIPPING NAME:** Butane

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**PRIMARY HAZARD CLASS/DIVISION:** Flammable Gas 2.1

**UN/NA NUMBER:** UN 1011

**PLACARDS:** Flammable Gas/1011

**LABEL:** FLAMMABLE GAS

**OTHER SHIPPING INFORMATION:** Shipping Containers: Cartons

### VESSEL (IMO/IMDG)

**SHIPPING NAME:** Butane

**UN/NA NUMBER:** UN 1011

**PRIMARY HAZARD CLASS/DIVISION:** Flammable Gas 2.1

**PLACARDS:** Flammable Gas / 1011

**LABEL:** DOT / IMO Label

### 15. REGULATORY INFORMATION

### 16. OTHER INFORMATION

**REASON FOR ISSUE:** New MSDS Format

**APPROVED BY:** J. Hutchins     **TITLE:** QA/RA Director

**PREPARED BY:** T. Swan

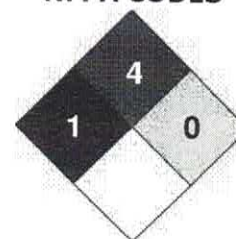
**INFORMATION CONTACT:** 1-800-999-3161

**REVISION SUMMARY:** This MSDS replaces the 08/14/2012 MSDS. Revised: Section 16: HMIS RATING (HEALTH, PHYSICAL HAZARD ).

#### HMIS RATING

HEALTH	<input type="checkbox"/>	1
FLAMMABILITY	<input type="checkbox"/>	4
PHYSICAL HAZARD	<input type="checkbox"/>	0
PERSONAL PROTECTION	<input type="checkbox"/>	

#### NFPA CODES



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