



SAFETY DATA SHEET

BUTANE FUEL CANISTER

Prepared to U.S. OSHA, ANSI, Canadian WHMIS 2015 Standards, and European Directives

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

1.1 Trade Name (as labeled):	Butane Fuel Canister
Synonyms:	None applicable
CAS No:	Mixture
1.2 Product Use:	For use only in portable gas appliances
1.3 Company Name:	Blue Rhino Global Sourcing
Company Address:	5650 University Parkway, Suite 400
Company Address Cont:	Winston-Salem, NC 27105
Business Phone:	(336) 659-6720 (Ferrellgas Safety Department)
1.4 Emergency Telephone Number:	Chemtrec: (800) 424-9300
Date of Current Revision:	June 5, 2015
Date of Last Revision:	May 7, 2015

SECTION 2 - HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: Flammable liquefied gas under pressure. Keep away from heat, sparks, flames, and all other ignition sources. Use only with adequate ventilation.

Health Hazards: Inhalation of gas may cause respiratory irritation, drowsiness, and headaches. Contact with liquid may cause freeze burns.

Flammability Hazards: This product is a flammable liquefied gas.

Reactivity Hazards: None.

Environmental Hazards: The environmental effects of this product have not been investigated, however release may cause adverse environmental effects.

US DOT Symbols:



EU and GHS Symbols:



Signal Word:

Danger

2.1 EU Labeling and Classification:

This product meets the definition of a hazardous substance or preparation as defined by the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives.

EU HAZARD CLASSIFICATION OF INGREDIENTS PER DIRECTIVE 1272/2008/EC:

Index Number: 203-448-7 is Annex VI index # is 601-004-00-0

Substances not listed either individually or in group entries must be self classified.

Components Contributing to Classification: Butane

2.2 Label Elements:

GHS Hazard Classifications:	Flammable Gases Category 1 Gases under pressure (Liquefied Gas)
Hazard Statements:	H220 Extremely flammable gas H280 Contains gas under pressure, may explode if heated
Prevention Statements:	P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Response Statements:	P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely. P381 Eliminate all ignition sources if safe to do so.
Storage Statements:	P410+P403 Protect from sunlight. Store in well-ventilated place.
Disposal Statements:	None Applicable

2.3 Health Hazards or Risks From Exposure:**Symptoms of Overexposure by Route of Exposure:**

The most significant routes of overexposure for this product is by inhalation. The symptoms of overexposure are described in the following paragraphs.

Acute:

Inhalation: May cause respiratory tract irritation. May cause headaches, drowsiness, or dizziness.

Skin Contact: Gas vapors are not irritating. Freeze burns are possible if skin is in contact with liquid.

Eye Contact: Gas vapors are not irritating. Freeze burns are possible if eyes come in contact with liquid.

Ingestion: No significant adverse effects are anticipated under normal conditions. Liquid can cause freeze burns

Chronic: No data available

Target Organs:

Acute: Respiratory

Chronic: No data available

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredients:	WT%	CAS No.	EINECS No.	Hazard Classification
Butane	95%	106-97-8	203-448-7	Flam. Gas 1, Press. Gas
Dimethyl sulfide	< 0.1%	75-18-3	Not Listed	Not Classified

Balance of other ingredients are miscellaneous hydrocarbons less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).

Note: All WHMIS required information is included in appropriate sections based on the ANSI Z400.1-2010 format and WHMIS 2015. This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all the information required by the CPR, EU Directives and the Japanese Industrial Standard JIS Z 7250:2000

SECTION 4 - FIRST AID MEASURES**4.1 Description of First Aid Measures:****Eye Contact:**

If product enters the eyes, flush with plenty of water or eye wash solution for several minutes. Remove contacts if present and easy to do. Seek medical attention if irritation persists.

Skin Contact:

Wash skin thoroughly with soap and water after handling. Seek medical attention if irritation develops and persists.

Inhalation:

If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention.

Ingestion:

If product is swallowed, call physician or poison center immediately. If professional advice is not available, do not induce vomiting. Never induce vomiting or give dilutents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or SDS with the victim to the health professional.

Medical Conditions Generally Aggravated by Exposure:

Pre-existing respiratory system problems may be aggravated by prolonged contact.

4.2 Symptoms and Effects Both Acute and Delayed:

Exposure to respiratory system may cause irritation.

4.3 Recommendations to Physicians:

Treat symptoms and eliminate overexposure.

SECTION 5 - FIRE FIGHTING MEASURES**5.1 Fire Extinguishing Materials:**

Use the following fire extinguishing materials:

Water Spray: Yes
Foam: Yes
Halon: Yes

Carbon Dioxide: Yes
Dry Chemical: Yes
Other: Any "C" Class

5.2 Unusual Fire and Explosion Hazards:

Do not extinguish fire until leak is addressed or source is shut off.

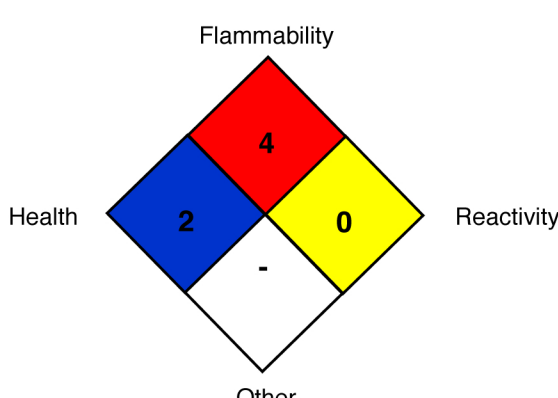






Explosive Sensitivity to Mechanical Impact: Yes

Explosive Sensitivity to Static Discharge: Yes



- Incipient fire responders should wear eye protection.
- Structural firefighters must wear Self-Contained Breathing Apparatus (SCBA) and full protective equipment.
- Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray.
- If possible, prevent run-off water from entering storm drains, bodies of water, or other environmentally sensitive areas.

5.3 Special Fire-Fighting Procedures:

NFPA RATING SYSTEM		HMIS RATING SYSTEM																			
HAZARDOUS MATERIAL IDENTIFICATION SYSTEM		HAZARDOUS MATERIAL IDENTIFICATION SYSTEM																			
		<table border="1"> <tr> <td>HEALTH HAZARD (BLUE)</td> <td>2</td> </tr> <tr> <td>FLAMMABILITY HAZARD (RED)</td> <td>4</td> </tr> <tr> <td>PHYSICAL HAZARD (YELLOW)</td> <td>1</td> </tr> </table>	HEALTH HAZARD (BLUE)	2	FLAMMABILITY HAZARD (RED)	4	PHYSICAL HAZARD (YELLOW)	1	<table border="1"> <thead> <tr> <th colspan="4">PROTECTIVE EQUIPMENT</th> </tr> <tr> <th>EYES</th> <th>RESPIRATORY</th> <th>HANDS</th> <th>BODY</th> </tr> </thead> <tbody> <tr> <td></td> <td>See Sect 8</td> <td></td> <td>See Sect 8</td> </tr> </tbody> </table>	PROTECTIVE EQUIPMENT				EYES	RESPIRATORY	HANDS	BODY		See Sect 8		See Sect 8
HEALTH HAZARD (BLUE)	2																				
FLAMMABILITY HAZARD (RED)	4																				
PHYSICAL HAZARD (YELLOW)	1																				
PROTECTIVE EQUIPMENT																					
EYES	RESPIRATORY	HANDS	BODY																		
	See Sect 8		See Sect 8																		
<p style="text-align: center;">For Routine Industrial Use and Handling Applications</p>																					
<p style="text-align: center;">Hazard Scale: 0 = Minimum 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic Hazard</p>																					

SECTION 6 - ACCIDENTAL RELEASE MEASURES (STEPS FOR SPILLS)

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Avoid breathing vapours and ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.

6.2 Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Keep out of sewers, storm drains, surface waters, and soils.

6.3 Spill and Leak Response:

Small Spills:

- Collect material via broom or mop. Place in tightly sealed containers for proper disposal.

Large Spills:

- Approach spill areas with caution.
- Create a dike or trench to contain material. Soak up with absorbent material such as clay, sand or other suitable non-reactive material.
- Place in leak-proof containers. Seal tightly for proper disposal.
- Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations and those of Canada and its Provinces, those of Australia, Japan and EU Member States (see Section 13, Disposal Considerations).

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for Safe Handling:

To prevent eye contact under the foreseeable conditions of use, wear appropriate safety eyewear. When handling, do not eat, drink, or smoke. Wash thoroughly after handling.

7.2 Storage and Handling Practices:

Contents under pressure. Keep container closed when not in use and store in well ventilated area.

7.3 Specific Uses:

For use only in portable gas appliances.



SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION**8.1 Exposure Parameters:**

Ingredients	CAS No.	OSHA	ACGIH
Butane	106-97-8	TWA 800 ppm, 1,900 mg/m ³	TWA 1,000 ppm

8.2 Exposure Controls:**Ventilation and Engineering Controls:**

Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132), or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

Respiratory Protection:

Not required for properly ventilated areas.

Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

Eye Protection:

Safety glasses or goggles are recommended.

If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards.

Hand Protection:

Chemical resistant gloves are recommended to prevent skin contact.

If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.

Body Protection:

Use body protect appropriate to task being performed.

If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on Basic Physical and Chemical Properties:**

Appearance (Physical State and Color): Clear Liquid

Odor: Sulfur (odorant added to aid in the detection of leaks)

Odor Threshold: No data available

pH: No data available

Melting/Freezing Point: No data available

Boiling Point: < 35.6°F (2°C)

Flash Point: -76°F (-60°C)

Evaporation Rate: Not applicable

Flammability (Solid; Gas): Extremely Flammable Gas

Upper/Lower Flammability or Explosion Limits: 1.9 – 8.5

Vapor Pressure (mm Hg @ 20°C (68° F): No data available

Vapor Density: Heavier > 1.0

Relative Density: No data available

Specific Gravity: 0.60

Solubility in Water: Not miscible

Weight per Gallon: No data available

Partition Coefficient (n-octanol/water): No data available

Auto-Ignition Temperature: 549°F (287°C)



Decomposition Temperature: No data available

Viscosity: No data available

9.2 Other Information: No data available

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity:	This product is not reactive.
10.2 Stability:	Stable under conditions of normal storage and use.
10.3 Possibility of Hazardous Reactions:	Will not occur.
10.4 Conditions to Avoid:	Avoid heat, flames, sparks and other sources of ignition. Minimize contact with material. Containers may rupture if exposed to heat.
10.5 Incompatible Substances:	Strong oxidizing agents.
10.6 Hazardous Decomposition Products:	Carbon oxides.

SECTION 11 - TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects:

Toxicity Data:

Butane	106-97-8	LC50 – Rat	658,000 mg/mg ³
--------	----------	------------	----------------------------

Suspected Cancer Agent:	Ingredients within this product are not found on one or more of the following lists: FEDERAL OSHA Z LIST, NTP, IARC, or CAL/OSHA and therefore are not considered to be cancer-causing agents by these agencies.
Irritancy:	Respiratory irritant.
Sensitization to the Product:	This product is not expected to cause skin sensitization.
Germ Cell Mutagenicity:	This product does not contain ingredients that are suspected to be a germ cell mutagenic.
Reproductive Toxicity:	This product is not expected to be a human reproductive toxicant.

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Toxicity:	No data available
12.2 Persistence and Degradability:	No specific data available on this product.
12.3 Bioaccumulative Potential:	No specific data available on this product.
12.4 Mobility in Soil:	No specific data available on this product.
12.5 Results of PBT and vPvB Assessment:	No specific data available on this product.
12.6 Other Adverse Effects:	No data available
12.7 Water Endangerment Class:	At present, there are no ecotoxicological assessments for this product.

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods:	Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of EU Member States and Canada.
13.2 EU Waste Code:	Not determined

SECTION 14 - TRANSPORTATION INFORMATION

14.1 U.S. Department of Transportation (DOT) Shipping Regulations:

This product is classified (per 49 CFR 172.101) by the U.S. Department of Transportation, as follows.

UN Identification Number:	UN1075
Proper Shipping Name:	Petroleum gases, liquefied (contains Butane)
Hazard Class Number and Description:	Class 2.1 – Flammable Gas
Packing Group:	Not applicable
DOT Label(s) Required:	Flammable Gas
North American Emergency Response Guidebook Number:	115



14.2 Environmental Hazards:**Marine Pollutant:**

The components of this product are not designated by the Department of Transportation to be Marine Pollutants (49 CFR 172.101, Appendix B).

14.3 Special Precaution for User:

None

14.4 International Air Transport Association Shipping Information (IATA):

This product is considered as dangerous goods.

14.5 International Maritime Organization Shipping Information (IMO):

This product is considered as dangerous goods.

SECTION 15 - REGULATORY INFORMATION**15.1 Safety, Health and Environmental Regulations Specific for the Substance or Mixture:**United States Regulations:**U.S. SARA Reporting Requirements:**

The components of this product are not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

U.S. SARA 311/312:

Acute Health: No; Chronic Health: Yes; Fire: Yes; Reactivity: No

U.S. CERCLA Reportable Quantity

None.

U.S. TSCA Inventory Status:

The components of this product are listed on the TSCA Inventory or are exempted from listing.

Other U.S. Federal Regulations:

None known.

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65):

This product does not contain ingredients on the Proposition 65 Lists

15.2 Canadian Regulations:**Canadian DSL/NDSL Inventory Status:**

Components are DSL Listed, NDSL Listed and/or are exempt from listing

Other Canadian Regulations:

Not applicable

Canadian Environmental Protection Act (CEPA) Priorities Substances Lists:

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.

Canadian WHMIS Classification:

This product has been classified per WHMIS 2015 standards.

15.3 European Economic Community Information:

This product meets the definition of a hazardous substance or preparation as defined by the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives. See Section 2 for Details.

Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

15.4 Australian Information for Product:

Components of this product are listed on the International Chemical Inventory list.

15.5 Japanese Information for Product:

Japanese Minister of International Trade and Industry (MITI) Status: The components of this product are not listed as Class I specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

15.6 International Chemical Inventories:

Listing of the components on individual country Chemical Inventories is as follows:

Australian Inventory of Chemical Substances (AICS): Listed

Korean Existing Chemicals List (ECL): Listed

Japanese Existing National Inventory of Chemical Substances (ENCS): Listed

Philippines Inventory of Chemicals and Chemical Substances (PICCS): Listed

U.S. TSCA: Listed



SECTION 16 - ADDITIONAL INFORMATION

Prepared By: Chris Eigbrett (MSDS to GHS Compliance)

Date of Printing: June 5, 2015

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 the need that information is current, applicable and suited to the circumstances of use. This safety sheet cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers. Blue Rhino assumes no responsibility for injury to vendee or third party person proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, Blue Rhino assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Compliance with all applicable federal, state, and local laws and local regulations remains the responsibility of the user.

END OF SDS SHEET

