

Safety Data Sheet - Butane

Section 1. Chemical Product and Company Identification

Product Name Master Appliance Ultratane Butane Fuel

Supplier Master Appliance Corp
2420 18th St
Racine WI 53403 USA

Date Prepared 03/14/14

Emergency Telephone 1-800-535-5053 (Infotrac)

Section 2. Hazards Identification

Physical State Gas (COLORLESS LIQUEFIED COMPRESS GAS).
Product is colorless, tasteless, odorless and highly flammable.

Emergency Overview WARNING!
FLAMMABLE GAS.
MAY CAUSE FLASH FIRE.
MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
CONTENTS UNDER PRESSURE.

Keep away from heat, sparks and flame. Do not puncture or incinerate container.
May cause target organ damage, based on animal data.
Use only with adequate ventilation.
Keep container closed.

Contact with rapidly expanding gases can cause frostbite.

WHMIS	Personal Protection Equipment	TDG (Ground)
		

Target Organs May cause damage to the following organs: Central Nervous System (CNS).

Route of Entry Inhalation
Acute exposure may cause nausea, vomiting, coughing and pulmonary irritation.

Potential Acute Health Effects

Eyes Contact with rapidly expanding gas may cause burns or frostbite.

Skin Contact with rapidly expanding gas may cause burns or frostbite.

Inhalation Acts as a simple asphyxiant.

Ingestion Ingestion is not a normal route of exposure for gases.

Potential Chronic Health Effects

Target Organs May cause damage to the following organs: Central Nervous System (CNS)

Medical Conditions Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

Aggravated By Over-Exposure

See Toxicological Information (Section 11)

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Section 3. Composition, Information on Ingredients

(Specific Chemical Identity: Common Name(s))		OSHA PEL	ACGIH TLV
Isobutane	CAS 75-28-5	NE	1000 ppm
Propane	CAS 74-98-6	1000ppm	1000 ppm
Butane	CAS 106-97-8	800ppm	TWA: 1000 ppm 8 hour(s)

Section 4. First Aid Measures

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Eye Contact Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin Contact In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. To avoid the risk of static discharge and gas ignition, soak contaminated clothing thoroughly with water before removing it. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Frostbite Try to warm up the frozen tissues and seek medical attention.

Inhalation Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion As this product is gas, refer to the inhalation section.

Section 5. Fire-Fighting Measures

Flammability of Product Flammable

Auto-Ignition Temperature 286.85°C (548.3°F)

Flash Point Closed Cup: -60.15°C (-76.3°F)

Flammable Limits Lower: 1.4% Upper: 9.5%

Products of Combustion Decomposition products may include the following materials:
carbon dioxide and carbon monoxide

Fire Hazards in the Presence of Various Substances Extremely flammable in the presence of the following materials or conditions:
open flames, sparks and static discharge and oxidizing materials

Fire-Fighting Media and Instructions In case of fire, use water spray (fog), foam or dry chemical.

In case of fire, allow gas to burn if flow cannot be shut off immediately. Apply water from a safe distance to cool container and protect surrounding area. If involved in fire, shut off flow immediately if it can be done without risk.

Contains gas under pressure. Flammable gas. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Avoid rocketing containers.

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Special Protective Equipment for Fire-Fighters

Fire-Fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Follow OSHA regulations [29 CFR*1910.120(g)]. Emergency response to hazardous substances.

Section 6. Accidental Release Measures

Personal Precautions

Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (section 8). Shut off gas supply if this can be done safely. Isolate area until gas has dispersed.

Environmental Precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Methods for Cleaning Up

Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment. Note: See section 1 for emergency contact information and section 13 for waste disposal.

Section 7. Handling and Storage

Handling

Use only with adequate ventilation. Use explosion-proof electrical (ventilating, lighting, and material handling) equipment. High pressure gas. Do not puncture or incinerate container. Keep container closed. Keep away from heat, sparks and flame. To avoid fire, eliminate ignition sources. Protect cylinders from physical damage; do not drag, roll, slide or drop. Use a suitable hand truck for cylinder removal.

Storage

Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Segregate from oxidizing materials. Cylinders should be stored upright with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52°C (125°F).

Section 8. Exposure Controls/Personal Protection

Engineering Controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor, or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Personal Protection

Eyes

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, or dusts.

Skin

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

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Hands

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Personal Protection in Case of a Large Spill

Self-contained breathing apparatus (SCBA) should be used to avoid inhalation of the product.

Product Name

Butane

ACGIH TLV (United States, 3/2012).

TWA: 1000 ppm 8 hour(s)

NIOSH REL (United States, 1/2013).

TWA: 1900 mg/m³ 10 hour(s)

TWA: 800 ppm 10 hour(s)

OSHA PEL 1989 (United States, 3/1989).

TWA: 1900 mg/m³ 10 hour(s)

TWA: 800 ppm 10 hour(s)

Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Molecular Weight	58.14 g/mole
Molecular Formula	C4-H10
Boiling/Condensation Point	-0.6°C (30.9°F)
Melting/Freezing Point	-135.4°C (-211.7°F)
Critical Temperature	151.9°C (305.4°F)
Vapor Pressure @ 70°F	30 ± 2 (psig)
Vapor Density	2 (air = 1)
Specific Volume (ft ³ /lb)	6.435
Gas Density (lb/ft ³)	0.1554

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Incompatibility with Various Substances	Extremely reactive or incompatible with the following materials: Oxidizing Materials
Hazardous Decomposition Products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous Polymerization	Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological Information

Toxicity Data

Product/Ingredient Name	Result	Species	Dose	Exposure
Butane	LC50 Inhalation Vapor	Rat	658000 mg/m3	4 hours

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Chronic Effects On Humans

May cause damage to the following organs: Central Nervous System (CNS).

Other Toxic Effects On Humans

No specific information is available in our database regarding the other toxic effects of this material to humans.

Special Effects

Carcinogenic Effects

No known significant effects or critical hazards.

Mutagenic Effects

No known significant effects or critical hazards.

Reproduction Toxicity

No known significant effects or critical hazards.

Section 12. Ecological Information

Aquatic Ecotoxicity

Not available

Products of Degradation

Products of degradation: Carbon Oxides (CO, CO₂) and water.

Environmental Fate

Not available

Environmental Hazards

No known significant effects or critical hazards.

Toxicity to the Environment

Not available

Section 13. Disposal Considerations

Product removed from the cylinder must be disposed of in accordance with appropriate Federal, State, and Local regulation.

Section 14. Transport Information

Regulatory Information	UN Number	Proper Shipping Name	Class	Packing Group	Label	Additional Information
DOT Classification	UN1075	BUTANE	2.1	Not Applicable (gas)		Limited Quantity Yes Packing Instruction Passenger Aircraft Quantity Limitation: Forbidden Cargo Aircraft Quantity Limitation: 150 kg Special Provisions 19, T50
TDG Classification	UN1075	BUTANE	2.1	Not Applicable (gas)		Explosive Limit and Limited Quantity Index 0.125

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Regulatory Information	UN Number	Proper Shipping Name	Class	Packing Group	Label	Additional Information
TDG Classification						ERAP Index 3000 Passenger Carrying Ship Index Forbidden Passenger Carrying Road or Rail Index Forbidden Special Provision 29
Mexico Classification	UN1075	BUTANE	2.1	Not Applicable (gas)		-

Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the products.

Section 15. Regulatory Information

United States

US Federal Regulations

TSCA 8(a) IUR: Not determined

United States Inventory (TSCA 8b): This material is listed or exempted.

SARA 302/304/311/312 Extremely Hazardous Substances: No products were found.

SARA 302/304 Emergency Planning and Notification: No products were found.

SARA 302/304/311/312 Hazardous Chemicals: Butane

SARA 311/312 MSDS Distribution - Chemical Inventory - Hazard Identification:

Butane: Fire hazard, Sudden release of pressure

Clean Water Act (CWA) 311: No products were found.

Clean Air Act (CAA) 112 Regulated Flammable Substances: Butane

State Regulations

Connecticut Carcinogen Reporting: This material is not listed.

Connecticut Hazardous Material Survey: This material is not listed.

Florida Substances: This material is not listed

Illinois Chemical Safety Act: This material is not listed.

Illinois Toxic Substances Disclosure to Employee Act: This material is not listed.

Louisiana Reporting: This material is not listed.

Louisiana Spill: This material is not listed.

Massachusetts Spill: This material is not listed.

Massachusetts Substances: This material is not listed.

Michigan Critical Material: This material is not listed.

Minnesota Hazardous Substance: This material is not listed.

New Jersey Hazardous Substances: This material is not listed.

New Jersey Spill: This material is not listed.

New Jersey Toxic Catastrophe Prevention Act: This material is not listed.

New York Acutely Hazardous Substances: This material is not listed.

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New York Toxic Chemical Release Reporting: This material is not listed.

Pennsylvania RTK Hazardous Substances: This material is not listed.

Rhode Island Hazardous Substances: This material is not listed.

Canada

WHMIS (Canada)

Class A: Compressed gas.

Class B-1: Flammable gas.

CEPA Toxic Substances: This material is not listed.

Canadian ARET: This material is not listed.

Canadian NPRI: This material is not listed.

Alberta Designated Substances: This material is not listed.

Ontario Designated Substances: This material is not listed.

Quebec Designated Substances: This material is not listed.

Section 16. Other Information

United States

Label Requirements

FLAMMABLE GAS.

MAY CAUSE FLASH FIRE.

MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

CONTENTS UNDER PRESSURE.

Canada

Label Requirements

Class A: Compressed Gas.

Class B-1: Flammable Gas.

United States

Hazardous Material Information System

Health	*	1
Flammability		4
Physical Hazards		0

National Fire Protection Association

Health	1
Flammability	4
Instability	0
Special	



Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.