



**MATERIAL SAFETY DATA SHEET (MSDS)
NORMAL BUTANE**

IDENTITY (As Used on Label and List) Normal Butane (DOT ID No: 1011 n-butane or UN 1075)		(Hazard Rating: Health-1/Fire-4/Reactivity-0) DOT Hazard Classification: 2.1 (Flammable Gas)		
Section I – Chemical Product and Company Identification				
Manufacturer's Name MARKWEST		Emergency Phone Number Markwest (800) 730-8388 / CHEMTREC (800) 424-9300		
Address (Number, Street, City, State and ZIP code) 1515 Arapahoe Street		Telephone Number for Information: (800) 730-8388		
Tower 1, Suite 1600		Date Prepared June 21, 2011		
Denver, Colorado 80202-2126		Signature of Preparer (optional) N/A		
Section II – Hazardous Ingredients/Identity Information				
Hazardous Components (Specific Chemical Identity; Common Name (s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Normal Butane (106-97-8)	800 ppm	Not established		95
Isobutane (75-28-5)	800* ppm	Not established		<4
Propane (74-98-6)	1000 ppm	Not established		<1
Section III – Physical/Chemical Characteristics				
Boiling Point 31° F (-1° C) Based on N-Butane		Specific Gravity (H ₂ O = 1): ~.58		
Vapor Pressure (Reid): 36 to 38 psi at 100°F		Melting Point: N/A		
Vapor Density (AIR = 1): ~ 2		Evaporation Rate (Butyl Acetate = 1): Very Rapid		
Solubility in Water: Slight				
Appearance and Odor: Colorless liquid under pressure. Faint hydrocarbon odor unless odorant is added.				
Section IV – Fire and Explosion Hazard Data				
Flash Point (Method Used): -76° F (-60° C) Based on N-Butane	Flammable Limits Based on N-Butane	LEL 1.5%	UEL 9.0%	
Extinguishing Media: Dry chemical, foam, carbon dioxide				

Emergency and First Aid Procedures:

Eyes: Rinse immediately with water. Remove contact lenses. Flush with water for 10-15 minutes. Consult a physician.

Skin: Warm frostbite areas gradually and get medical help if there is evidence of tissue damage.

Swallowed: Rinse mouth with water. Drink 1-2 glasses of milk or water. Do not induce vomiting unless directed by a physician.

Inhaled: Remove patients to fresh air. If breathing has stopped, restore breathing at once. Administer oxygen and get medical help.

Section VII – Precautions for Safe Handling and Use

Steps to be taken in Case Material is Released or Spilled:

Isolate spill or leak area immediately for at least 160 to 300ft in all directions. Keep unauthorized personnel away.

Waste Disposal Method:

Land disposal or burial (sanitary landfill)

Precautions to Be Taken in Handling and Storing:

Butane can be stored in liquid form under its vapor pressure at ambient temperatures, or refrigerated liquid can be stored at atmosphere pressure.

Other Precautions:

N/A

Section VIII – Control Measures

Respiratory Protection (Specify Type):

Wear positive pressure self-contained breathing apparatus.

Ventilation: N/A	Local Exhaust	Special
	Mechanical (General)	Other

Protective Gloves Rubber gloves	Eye Protection Safety goggles
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Other Protective Clothing or Equipment:

Wear thermal protective clothing when handling refrigerated liquids. Clothing that becomes wet should immediately removed due to its flammability hazard.

Work/Hygienic Practices

Quick trench facilities and/or eye washing fountains should be provided within the immediate work area for emergency use.

N/A – Not Applicable

N/D – Not Determined

~ -- Approximately

* -- Based on LP (Gas)