



Butane

In Case of Emergency Call: 911

Section 1: Identification

Product Name: Butane

Chemical Name/Synonyms: C₄H₁₀

Company:

blüLeaf LLC

5900 Balcones Dr

#20949

Austin, TX 78731

Phone 512-759-8075

In emergency call 911.

For information about this SDS, call 512-759-8075

Section 2: Hazard(s) Identification



Hazard Classification:

Flammable (Category 1)

Gases Under Pressure

Hazard Statements:

Contains gas under pressure; may explode if heated.

Extremely flammable gas.

Precautionary Statements

Prevention:

Keep away from heat / sparks / open flames / hot surfaces, - No Smoking

Response:

Eliminate all ignition sources if safe to do so.

Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

Storage:

Protect from sunlight.

Store in well-ventilated place.

Section 3: Composition/ Information on Ingredients

Chemical Name	Chemical Family	Trade Names	CAS #
Butane	Hydrocarbon, Aliphatic, Saturated	N-Butane; Liquefied Petroleum Gas; LPG; Iso-Butane; Normal Butane; Butyl Hydride; UN 1011; C ₄ H ₁₀	106-97-8

Section 4: First-Aid Measures

Skin Contact	Eye Contact	Inhalation	Ingestion, Swallowing:	Note to Physicians
If frostbite or freezing occur, immediately with flush with plenty of lukewarm water (105 – 115F; 41-46 C). DO NOT USE HOT WATER. If warm waters are not available, gently wrap affected parts in blankets. Get immediate medical attention.	Contact with liquid: Immediately flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.	Not likely route of exposure.	If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. If breathing is difficult, oxygen should be administered by qualified personnel. Get immediate medical attention.	For inhalation, consider oxygen.

Section 5: Fire-Fighting Measures

Suitable extinguishing agents:	Products of Combustion	Special protective equipment for firefighters:
Carbon Dioxide. Regular Dry Chemical Large fires: Flood with fine water spray.	Carbon Monoxide, Carbon Dioxide, Water and tonic and irritating fumes.	<ul style="list-style-type: none"> Any supplied-air respirator with full facepiece and operated a pressure-demand or other positive-pressure mode in combination with a separate escape supply.

Section 6: Accidental Release Measures

Personal Precautions	Environmental Precaution	Methods for Containment
Keep unnecessary people away, isolate hazard area and deny entry. Ventilate closed spaces before entering. Do not touch spilled material.	Avoid heat, flames, sparks and other sources of ignition.	Stop leak, if possible, without personal risk. Reduce vapors with water spray. Remove sources of ignition.

Methods for Cleanup	Other Information
Stop leak, evacuate area. Use protective equipment. Contact emergency personnel.	None

Section 7: Handling and Storage

Handling	Storage
Grounding and bonding required. Subject to storage regulations. U.S. OSHA 29 CFR 1910.101. Keep separated from incompatible substances.	Store and handle in accordance with all current regulations and standards. Subject to storage regulations: subject to storage regulations: U.S. OSHA 29 CFR 1910.110.

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines

N-BUTANE: 800 ppm (1900 mg/m³) OSHA TWA (vacated by 58 FR 35338, June 30, 1993) 800 ppm (1900 mg/m³) NIOSH recommended TWA 10 hour(s) LIQUIFIED PETROLEUM GAS (LPG): 1000 ppm (1800 mg/m³) OSHA TWA 1000 PPM (1800 mg/m³) NIOSH recommended TWA 10 hour(s) ALIPHATIC HYDROCARBON GASES ALKANE (C1-C4): 1000 ppm ACGIH TWA

Engineering Controls

Handle only in fully enclosed systems

Eye Protection	Skin Protection	Respiratory Protection
For the eye: Eye protection not required, but recommended. For the liquid Wear splash resistant safety goggles. Contact lenses should not be worn. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.	For the gas: Protective clothing is not required. For the liquid: Wear appropriate protective, cold insulating clothing.	Any supplied=air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply.

General Hygiene Considerations

- Avoid breathing vapor or mist
- Avoid contact with eyes and skin
- Wash thoroughly after handling and before eating or drinking

Section 9: Physical and Chemical Properties

Physical State	Appearance	Color	Change in Appearance	Physical Form	Odor	Taste
Gas	Colorless	Colorless	N/A	Gas	Faint petroleum-like odor	N/A

Flash Point	Flammability	Partition Coefficient	Autoignition Temperature	Upper Explosive Limits	Lower Explosive Limits
-76 F (-60 C) (CC)	Not Available	630.96 (log = 2.80) (estimated from water solubility)	549 F (287 C)	0.085	0.019

Boiling Point	Freezing Point	Vapor Pressure	Vapor Density	Specific Gravity	Water Solubility	pH	Odor Threshold	Evaporation Rate	Viscosity
30 F (-1 C)	-216 F (-138 C)	1557 mmHg @ 20 C	2.1 (Air = 1)	0.5788 @ 0 C	0.15	N/A	6.16 ppm	Not applicable for gas. Liquefied n-butane will evaporate rapidly at room temperature	Not available

Molecular Weight	Molecular Formula	Density	Weight Per Gallon	Volatility by Volume	Volatility	Solvent Solubility
58.12	C-H3-(C-H2)2-C-H3	Not available	Not available	100%	Not applicable	Soluble: Alcohol, Ether, Chloroform

Section 10: Stability and Reactivity

Stability	Conditions to Avoid	Incompatible Materials
Stable at normal temperatures and pressure.	Stable at normal temperatures and pressure.	Oxidizing materials, halogen compounds

Hazardous Decomposition Products	Possibility of Hazardous Reactions
Oxides of Carbon	Will not Polymerize

Section 11: Toxicological Information

Acute Effects

Oral LD50	Dermal LD50	Inhalation
LC (50): 658 mg/l (270,000 ppm) butane (4-hour rate)	Not established	Irritation, nausea, vomiting, headache, drowsiness, symptoms of drunkenness, tingling sensation, suffocation, convulsions, coma, can displace oxygen at high concentrations

Eye Irritation	Skin Irritation	Sensitization
Frostbite, blurred vision	Blisters, frostbite	Central nervous system depression, difficulty breathing

Chronic Effects

Carcinogenicity	Mutagenicity	Reproductive Effects	Developmental Effects
None	Not Established	Not Established	No data

Section 12: Ecological Information (non-mandatory)

Eco Toxicity	Persistence/ Degradability	Bioaccumulation / accumulation	Mobility in Environment
Fish toxicity: Not available Invertebrate toxicity: Not available Algae toxicity: Not available Phyto toxicity: Not available Other toxicity: Expected to exist entirely in the vapor phase in ambient air.	Not available	Not available	Not available

Section 13: Disposal Considerations (non-mandatory)

Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D001

Section 14: Transport Information (non-mandatory)

U.S. DOT 49 CFR 172.101

Proper Shipping Name	ID Number	Hazard Class or Division	Packing Group	Labeling Requirements	Passenger Aircraft or Railcar Quantity Limitations	Cargo Aircraft Only Quantity Limitations	Additional Shipping Descriptions
Butane	UN1011	2.1	Not applicable	2.1	Forbidden	150 kg	N / A

Canadian Transportation of Dangerous Goods

Shipping Name	UN Number	Class	Packing Group / Risk Group
Butane	UN 1011	2.1	Not Applicable

Section 15: Regulatory Information (non-mandatory)

U.S. Regulations

CERCLA Sections	SARA 355.30	SARA 355.40
Not Regulated	Not Regulated	Not Regulated

SARA 370.21

Acute	Chronic	Fire	Reactive	Sudden Release
Yes	No	Yes	No	Yes

SARA 372.65: **Not Regulated**

OSHA Process Safety: **Not Regulated**

State Regulations: **CA Proposition 65 – Not Regulated**

Canadian Regulations: **WHMS Classification – A, B1**

National Inventory Status

U.S. Inventory (TSCA)	TSCA 12b Export Notification	Canadian Inventory (DSL/NDSL)
Listed on Inventory	Not Listed	Listed on Inventory

Section 16: Other Information

NFPA Rating

Health = 1	Fire = 4	Reactivity = 0
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0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard,
3 = severe hazard, 4 = extreme hazard

Date of Preparation 2/25/2022