

FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

Material Safety Data Sheet (MSDS)

MSDS #: 179.10

Revision Date: March 15, 2001

Section 1 — Chemical Product and Company Identification

Butane (lecture bottle or cylinder)

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

Section 2 — Composition, Information on Ingredients

Butane

Synonyms: n-butane

CAS#: 106-97-8

Section 3 — Hazards Identification

Colorless gas. Faint, disagreeable odor.

An asphyxiant gas. Exposure in closed quarters could lead to asphyxiation and death.

A very dangerous fire and explosion hazard. Highly flammable.

FLINN AT-A-GLANCE

Health-0

Flammability-3

Reactivity-0

Exposure-1

Storage-0

0 is low hazard, 3 is high hazard

Section 4 — First Aid Measures

Call a physician, seek medical attention for further treatment, observation and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped give artificial respiration immediately.

Eye: Immediately flush with fresh water for 15 minutes.

External: Wash with soap and water.

Section 5 — Fire Fighting Measures

Highly flammable gas.

Dangerous fire and explosion hazard. Explosive limits in air.

Flash Point: -76 C Upper: 85% Lower: 1.9% Autoignition Temperature: 550 F

Fire Fighting Instructions: Stop flow of gas. Use triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

NFPA CODE

H-1

F-4

R-0

Section 6 — Accidental Release Measures

Gas leak requires that the area be evacuated and ventilated at once. Avoid any sources of ignition. If possible, carry the cylinder out of doors and allow the cylinder to leak until empty.

Section 7 — Handling and Storage

Flinn Suggested Chemical Storage Pattern: Organic #3. Store with hydrocarbons, esters and aldehydes.

Section 8 — Exposure Controls, Personal Protection

Avoid contact with eyes, skin and clothing. Wear chemical splash goggles, chemical-resistant gloves and chemical-resistant apron.

Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire).

Exposure guidelines: TWA 800 ppm, (NIOSH)

Section 9 — Physical and Chemical Properties

Colorless gas; faint, disagreeable odor.

Solubility: Not soluble in water; soluble in alcohol and chloroform. Will not react with moisture.

Formula: C₄H₁₀

Formula Weight: 58.12

Specific Gravity of Vapor: 2.07 at 0 C

Boiling Point: 0.5 C

Section 10 — Stability and Reactivity

An asphyxiant gas. Avoid use in closed quarters. Avoid use near any source of ignition. Highly flammable.

Avoid contact with strong oxidizers.

Shelf life: Good.

Section 11 — Toxicological Information

Acute effects: N.A.

Chronic effects: Dermatitis

Target organs: N.A.

ORL-RAT LD50: N.A.

IHL-RAT LC50: 658 gm/m³/4H

SKN-RBT LD50: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

Section 12 — Ecological Information

Data not yet available.

Section 13 — Disposal Considerations

Please consult with state and local regulations.

Flinn Suggested Disposal Method #18a is one option.

Section 14 — Transport Information

Shipping Name: Petroleum gases, liquefied

Hazard Class: 2.1, Flammable gas

UN Number: UN1075

N/A = Not applicable

Section 15 — Regulatory Information

TSCA-listed, EINECS-listed (203-4487), RCRA code D001.

Section 16 — Other Information

Consult your copy of the Flinn Scientific Catalog/Reference Manual for additional information about laboratory chemicals. This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. Flinn Scientific Inc. assumes no legal responsibility for use or reliance upon this data.

FLINN SCIENTIFIC INC.

"Your Safer Source for Science Supplies"

Flinn--"Your Safer Source for Chemicals"

flinn@flinnsci.com www.flinnsci.com
P.O. Box 219 Batavia IL 60510
(800) 452-1261 Fax (866) 452-1436