# FLINN SCIENTIFIC, INC. Material Safety Data Sheet (MSDS)

MSDS #: 179.10

Revision Date: June 8, 2010

### 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 and 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.

Eve: Immediately flush with fresh water for at least 15 minutes.

External: Wash with soap and fresh water for at least 15 minutes.

#### **SECTION 5 — FIRE FIGHTING MEASURES**

NFPA CODE Highly flammable gas. Dangerous fire and explosion hazard. Explosive limits in air. H-1 Flash Point: -76 °C Upper: 85% Lower: 1.9% Autoignition Temperature: 550 °F F-4 R-0

Fire Fighting Instructions: Stop flow of gas. Use a triclass, dry chemical fire extinguisher. Firefighters should

wear PPE and SCBA with full facepiece operated in positive pressure mode.

#### **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)

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SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Colorless gas with a faint, disagreeable odor.

Boiling Point: 0.5 °C

Solubility: Not soluble in water. Soluble in alcohol and chloroform.

Specific Gravity of Vapor: 2.07 at 0 °C

Will not react with moisture.

Formula: C<sub>4</sub>H<sub>10</sub>

Formula Weight: 58.12

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 LD<sub>50</sub>: N.A.

IHL-RAT LC<sub>50</sub>: 658 g/m<sup>3</sup>/4H

SKN-RBT LD<sub>50</sub>: 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**

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Consult your copy of the *Flinn Science Catalog/Reference Manual* for additional information about laboratory chemicals.