

# FLINN SCIENTIFIC, INC.

## Safety Data Sheet (SDS)

SDS #: 231.50

Revision Date: September 22, 2014

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### 1-Chlorobutane

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

CHEMTREC Emergency Phone Number: (800) 424-9300

Signal Word **DANGER**

Pictograms



### SECTION 2 — HAZARDS IDENTIFICATION

Hazard class: Flammable liquids (Category 2). Highly flammable liquid and vapor (H225). Keep away from heat, sparks, open flames, and hot surfaces. No smoking (P210).

### SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
1-Chlorobutane	109-69-3	C <sub>4</sub> H <sub>9</sub> Cl	92.567	
Synonyms: n-Butyl chloride; Butyl chloride				

### SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

**If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

**If on skin (or hair):** Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353).

**If swallowed:** Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

### SECTION 5 — FIRE FIGHTING MEASURES

Class IB flammable liquid.

Flash point: -9 °C Flammable limits: Upper 10.1% Lower: 1.8% Autoignition Temperature: 240 °C

When heated to decomposition, may emit toxic fumes.

**In case of fire:** Use tri-class dry chemical fire extinguisher (P370+P378).

NFPA CODE

H-1

F-3

R-0

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Remove all ignition sources and ventilate area. Contain the spill with sand or other inert absorbent material and deposit in a sealed bag or container. See Sections 8 and 13 for further information.

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**SECTION 7 — HANDLING AND STORAGE**

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Flinn Suggested Chemical Storage Pattern: Organic #4. Store with ethers, ketones, and halogenated hydrocarbons. Keep container tightly closed (P233). Keep cool (P235). Ground or bond container and receiving equipment (P240). Use explosion-proof electrical and ventilating equipment (P241). Use only non-sparking tools (P242). Take precautionary measures against static discharge (P243).

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**SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION**

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Wear protective gloves, protective clothing, and eye protection (P280). Wash thoroughly after handling.

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Colorless liquid. Pungent odor.

Insoluble in water. Miscible with alcohol and ether.

Boiling point: 77-78 °C

Melting point: -123 °C

Refractive index: 1.4023

Specific gravity: 0.8857

Vapor density: 3.2

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**SECTION 10 — STABILITY AND REACTIVITY**

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Avoid heat, sunlight, and ignition sources. Reacts with alkali and alkaline earth metals, as well as bases and strong oxidizing agents.

Shelf life: Fair, store in a cool, dry place.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Skin, eye and mucous membrane irritant. Narcotic effects at high concentrations.

Chronic effects: Kidney, liver, heart, and CNS effects

Target organs: Kidney, liver, heart, and CNS.

ORL-RAT LD<sub>50</sub>: 2670 mg/kg

IHL-RAT LCL<sub>0</sub>: 8000 ppm/4H

SKN-RBT LD<sub>50</sub>: N.A.

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

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**SECTION 12 — ECOLOGICAL INFORMATION**

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EC<sub>50</sub> *Daphnia* 3020mg/L/48H

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #4b is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Chlorobutanes. Hazard class: 3. UN number: UN1127.

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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TSCA listed

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**SECTION 16 — OTHER INFORMATION**

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

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