

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 232.50

Revision Date: October 12, 2011

### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### tert-Butyl chloride

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

tert-Butyl chloride

Synonym: 2-Chloro-2-methylpropane

CAS#: 507-20-0

### SECTION 3 — HAZARDS IDENTIFICATION

Colorless liquid. Hexane-like odor.

Moderately toxic by ingestion. Body tissue irritant. Avoid all body tissue contact.

Flammable liquid. Dangerous fire hazard when exposed to heat or flame.

#### FLINN AT-A-GLANCE

Health-2

Flammability-3

Reactivity-0

Exposure-1

Storage-3

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.

Eye or External: Immediately flush with fresh water for at least 15 minutes.

Internal: Rinse mouth. Give large quantities of water for dilution. Call a physician or poison control at once.

### SECTION 5 — FIRE FIGHTING MEASURES

Class IB flammable liquid.

Flash point: -27 °C

Container explosion may occur under fire conditions.

Upper: 10.1% Lower: 1.8% Autoignition Temperature: 540 °C

**Fire Fighting Instructions:** Use a triclass, dry chemical fire extinguisher. Firefighters should wear PPE and

SCBA with full facepiece operated in positive pressure mode.

#### NFPA CODE

H-2

F-3

R-0

### SECTION 6 — ACCIDENTAL RELEASE MEASURES

Restrict unprotected personnel from the area. 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.

### SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #4. Store with ethers, ketones, halogenated hydrocarbons, and ethylene oxide.

Store in a dedicated flammables cabinet. If a flammables cabinet is not available, store in Flinn Saf-Stor can.

Use and dispense in a hood.

### 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).

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

Colorless liquid with a sweet, hexane-like odor.  
Solubility: Soluble in alcohol, ether, and chloroform.  
Formula: C<sub>4</sub>H<sub>9</sub>Cl  
Formula weight: 92.57

Boiling point: 50-52 °C  
Melting point: -26 °C  
Specific gravity: 0.846

**SECTION 10 — STABILITY AND REACTIVITY**

Incompatible with strong oxidizing agents and strong bases.  
Shelf life: Indefinite, if stored properly.

**SECTION 11 — TOXICOLOGICAL INFORMATION**

Acute effects: Eye and skin irritant.  
Chronic effects: N.A.  
Target organs: N.A.

ORL-RAT LD<sub>50</sub>: 2900 mg/kg  
IHL-RAT LC<sub>50</sub>: N.A.  
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 review all federal, state and local regulations that may apply, before proceeding.  
Flinn Suggested Disposal Method 27j is one option.

**SECTION 14 — TRANSPORT INFORMATION**

Shipping name: Chlorobutanes  
Hazard class: 3, Flammable liquid  
UN number: UN1127  
N/A = Not applicable

**SECTION 15 — REGULATORY INFORMATION**

TSCA-listed, EINECS-listed (208-066-4), RCRA 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.**