

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 514.00

Revision Date: August 18, 2011

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Methyl Isobutyl Ketone

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

Methyl isobutyl ketone

Synonym: 4-methyl-2-pentanone; MIBK

CAS#: 108-10-1

SECTION 3 — HAZARDS IDENTIFICATION

Colorless liquid with an ether odor.

Slightly toxic by ingestion, inhalation or skin absorption.

Flammable liquid. May form explosive peroxides, do not distill to dryness.

FLINN AT-A-GLANCE

Health-1

Flammability-3

Reactivity-1

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 out mouth. Give large quantities of water for dilution. Induce vomiting. Call a physician or poison control at once.

SECTION 5 — FIRE FIGHTING MEASURES

Class 1B flammable liquid.

Flash point: 13 °C Upper: 8% (93%) Lower: 1.2% (93%) Autoignition Temperature: 459 °C

When heated to decomposition, emits acrid fumes.

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-1

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 a Flinn Saf-Stor Can. Keep container tightly closed. Use and dispense in a hood. Avoid prolonged storage; may form explosive peroxides.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and a 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: PEL 100 ppm, STEL 75 ppm (OSHA, NIOSH)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Colorless liquid with an odor like ether.

Solubility: Very slightly soluble in water. Miscible with most organic solvents.

Formula: $(\text{CH}_3)_2\text{CHCH}_2\text{COCH}_3$

Formula weight: 100.18

Boiling point: 117 °C

Melting point: -84 °C

Refractive index: 1.3962

Specific gravity: 0.7965

Vapor pressure: 15 mm (20 °C)

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with oxidizers, reducers, and strong bases.

Shelf life: Fair to poor. May form explosive peroxides; do not distill to dryness and avoid prolonged storage.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Harmful liquid, irritant

Chronic effects: N.A.

Target organs: Central nervous system

ORL-RAT LD₅₀: 2080 mg/kgIHL-MUS LC₅₀: 23300 mg/m³SKN-RBT LD₅₀: >20 g/kg

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 #18b is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Methyl isobutyl ketone

Hazard class: 3, Flammable liquid

UN number: UN1245

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (203-550-1), RCRA code U161.

SECTION 16 — OTHER INFORMATION

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