

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 511.00

Revision Date: August 18, 2011

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### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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#### Methyl Ethyl Ketone

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

CHEMTREC Emergency Phone Number: (800) 424-9300

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### SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

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Methyl ethyl ketone

Synonym: MEK; 2-Butanone

CAS#: 78-93-3

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### SECTION 3 — HAZARDS IDENTIFICATION

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Colorless liquid with an odor like acetone.

Narcotic by inhalation. Severe eye irritant. Slightly toxic by ingestion, inhalation, and skin absorption.

Avoid inhalation, ingestion, and skin absorption.

Flammable liquid; dangerous fire risk.

#### FLINN AT-A-GLANCE

Health-1

Flammability-3

Reactivity-2

Exposure-1

Storage-3

0 is low hazard, 3 is high hazard

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### SECTION 4 — FIRST AID MEASURES

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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.

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### SECTION 5 — FIRE FIGHTING MEASURES

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Class IA flammable liquid.

Flash point: -3 °C Upper: 10.1% Lower: 1.8% Autoignition Temperature: 516 °C

When heated to decomposition, emits acrid smoke and irritating 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-1

F-3

R-0

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### SECTION 6 — ACCIDENTAL RELEASE MEASURES

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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.

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### SECTION 7 — HANDLING AND STORAGE

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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.

Use and dispense in a hood.

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### SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

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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 200 ppm, STEL 300 ppm (OSHA, NIOSH)

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

Colorless liquid with an odor like acetone.

Solubility: Soluble in alcohol and ether.

Miscible with oils.

Formula: CH<sub>3</sub>COC<sub>2</sub>H<sub>5</sub>

Formula weight: 72.106

Boiling point: 80 °C

Melting point: -87 °C

Refractive index: 1.3788

Specific gravity: 0.7999

**SECTION 10 — STABILITY AND REACTIVITY**

Avoid contact with oxidizers, reducers, and bases.

Shelf life: Good, if stored properly.

**SECTION 11 — TOXICOLOGICAL INFORMATION**

Acute effects: Severe eye irritant, nausea, dizziness, headache, GI disturbances

Chronic effects: Dermatitis

Target organs: Central nervous system

ORL-RAT LD<sub>50</sub>: 2737 mg/kg

IHL-RAT LC<sub>50</sub>: 23500 mg/m<sup>3</sup>/8H

SKN-RBT LD<sub>50</sub>: 6480 mg/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 ethyl ketone

Hazard class: 3, Flammable liquid

UN number: UN1193

N/A = Not applicable

**SECTION 15 — REGULATORY INFORMATION**

TSCA-listed, EINECS-listed (201-159-0), RCRA code U159.

**SECTION 16 — OTHER INFORMATION**

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