

**SDS** #: 514

**Revision Date:** September 22, 2014

1/13/2025: File reviewed; more current MSDS/SDS not available. CAS

Safety Data Sheet (SDS)

#### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Signal Word DANGER

# Methyl Isobutyl Ketone

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

Chemtrec Emergency Phone Number: (800) 424-10001

**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 (P210).



Hazard class: Acute toxicity, oral (Category 5). May be harmful if swallowed (H303).

Hazard class: Skin corrosion or irritation (Category 3). Causes mild skin irritation (H316).



Hazard class: Serious eye damage or irritation (Category 2A). Causes serious eye irritation (H319).

Hazard class: Acute toxicity, inhalation (Category 4). Harmful if inhaled (H332). Avoid breathing mist, vapors, or spray (P261).

Hazard class: Specific target organ toxicity, single exposure; Respiratory tract irritation (Category 3). May cause respiratory irritation (H335).

## SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

| Component Name                               | CAS<br>Number | Formula   | Formula<br>Weight | Concentration |
|--|---------------|---|-------------------|---------------|
| Methyl isobutyl ketone                       | 108-10-1      | (CH <sub>3</sub> ) <sub>2</sub> CHCH <sub>2</sub> COCH <sub>3</sub> | 100.09            |               |
| Synonyms: 4-Methyl-2-pentanone; MIBK; Hexone |               |   |                   |               |

## SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

**If inhaled:** Remove victim to fresh air in a position comfortable for breathing (P304+P340). **If in eyes:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing (P305+P351+P338). **If eye irritation persists eyes:** Get medical advice or attention (P337+P313). **If on skin:** Immediately remove all contaminated clothing. Rinse skin with water (P303+P361+P353). **If skin irritation occurs:** Get medical advice or attention (P332+P313).

If swallowed: Rinse mouth.

## SECTION 5 — FIRE FIGHTING MEASURES

Class 1B flammable liquid.

**NFPA** Code

Flash point: 18 °C Flammable limits: Lower: 1.2% Upper: 8% Autoignition Temperature: 448 °C

H-1

When heated to decomposition, may emit toxic fumes.

F-3

In case of fire: Use a tri-class dry chemical fire extinguisher.

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.

## SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic #4. Store with ethers, ketones, and halogenated hydrocarbons. Store in a dedicated flammables cabinet. If a flammables cabinet is not available, store in a Flinn Saf-Stor<sup>TM</sup> can. Avoid prolonged storage (see Section 10). Keep container tightly closed (P233). Keep cool (P235). Take precautionary measures against static discharge (P243). Use only in a hood or well-ventilated area (P271).

## SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection (P280). Wash hands thoroughly after handling (P264). Use only in a hood or well-ventilated area (P271).

Exposure guidelines: PEL 100 ppm (OSHA); TLV 20 ppm STEL 75 ppm (ACGIH)

#### SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Colorless liquid. Odor like ether.

Soluble: Very slightly in water. Miscible with most organic solvents.

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: Skin and eye irritant, somnolence. ORL-RAT LD<sub>50</sub>: 2080 mg/kg
Chronic effects: N.A. IHL-MUS LC<sub>50</sub>: 23,300 mg/m<sup>3</sup>
SKN-RBT LD<sub>50</sub>: greater than 20 g/kg

#### 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.

#### SECTION 15 — REGULATORY INFORMATION

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

#### SECTION 16 — OTHER INFORMATION

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

N/A = Not applicable

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

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