

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Methyl Isobutyl Ketone (MIBK) ACS Grade

**Synonyms:** 4-methylpentan-2-one, Methyl Isobutyl Ketone (MIBK)

**CAS Number:** 108-10-1

**Grade/Purity:** ACS Reagent Grade

**Product Type:** Solvents

**Product Use:** Industrial, Manufacturing or Laboratory use

**Manufacturer/Supplier:** Alliance Chemical, 204 South Edmond St, Taylor, Texas 76574

**Information:** 512-365-6838 | [www.alliancechemical.com](http://www.alliancechemical.com)

**Emergency:** CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

### 2. HAZARDS IDENTIFICATION

**Signal Word:** Danger

**GHS Pictograms:**



**Hazard Statements:**

|        |                                                      |
|--------|------------------------------------------------------|
| H225   | Highly flammable liquid and vapour                   |
| H319   | Causes serious eye irritation                        |
| H332   | Harmful if inhaled                                   |
| H335   | May cause respiratory irritation                     |
| H351   | Suspected of causing cancer                          |
| EUH066 | Repeated exposure may cause skin dryness or cracking |

**Precautionary Statements:**

|      |                                                                                                |
|------|------------------------------------------------------------------------------------------------|
| P201 | Obtain special instructions before use.                                                        |
| P202 | Do not handle until all safety precautions have been read and understood.                      |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P233 | Keep container tightly closed.                                                                 |
| P240 | Ground and bond container and receiving equipment.                                             |
| P241 | Use explosion-proof electrical, ventilating, and lighting equipment.                           |
| P242 | Use non-sparking tools.                                                                        |
| P243 | Take precautionary measures against static discharge.                                          |
| P260 | Do not breathe dust, fume, gas, mist, vapours or spray.                                        |
| P261 | Avoid breathing dust, fume, gas, mist, vapours or spray.                                       |
| P264 | Wash hands and face thoroughly after handling.                                                 |
| P271 | Use only outdoors or in a well-ventilated area.                                                |
| P280 | Wear protective gloves, protective clothing, and eye/face protection.                          |
| P281 | Use personal protective equipment as required.                                                 |

|                |                                                                                                                                  |
|----------------|----------------------------------------------------------------------------------------------------------------------------------|
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.                           |
| P304+P340      | IF INHALED: Remove person to fresh air and keep comfortable for breathing.                                                       |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308+P313      | IF exposed or concerned: Get medical advice or attention.                                                                        |
| P312           | Call a POISON CENTER or doctor if you feel unwell.                                                                               |
| P337+P313      | If eye irritation persists: Get medical advice or attention.                                                                     |
| P370+P378      | In case of fire: Use appropriate media to extinguish.                                                                            |
| P403+P233      | Store in a well-ventilated place. Keep container tightly closed.                                                                 |
| P403+P235      | Store in a well-ventilated place. Keep cool.                                                                                     |
| P405           | Store locked up.                                                                                                                 |

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

| COMPONENT                     | % MIN | % MAX | CAS #    | EINECS# / ELINCS# | FORMULA                          | MOLECULAR WEIGHT |
|-------------------------------|-------|-------|----------|-------------------|----------------------------------|------------------|
| Methyl Isobutyl Ketone (MIBK) | 99    | 100   | 108-10-1 | 203-550-1         | C <sub>6</sub> H <sub>12</sub> O | 100.16 g/mol     |

### 4. FIRST-AID MEASURES

|                   |                                                                                                                                                                                        |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eyes</b>       | Rinse with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention immediately.                             |
| <b>Skin</b>       | Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing. Wash with soap. Get medical attention immediately.                                |
| <b>Inhalation</b> | Move person to fresh air and keep comfortable for breathing. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately. |
| <b>Ingestion</b>  | Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.                             |

### 5. FIRE-FIGHTING MEASURES

|                             |                                                                                                                         |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------|
| <b>Suitable Media</b>       | Alcohol-resistant foam, CO <sub>2</sub> , dry chemical powder. Water spray may be used to cool fire-exposed containers. |
| <b>Unsuitable Media</b>     | Do not use a solid water stream — may scatter and spread fire.                                                          |
| <b>Protective Equipment</b> | Wear self-contained breathing apparatus and full protective clothing.                                                   |
| <b>Combustion Products</b>  | May include carbon oxides and other toxic fumes. See Section 10.                                                        |

### 6. ACCIDENTAL RELEASE MEASURES

|                                  |                                                                                                         |
|----------------------------------|---------------------------------------------------------------------------------------------------------|
| <b>Personal Precautions</b>      | Use PPE as described in Section 8. Ensure adequate ventilation. Evacuate personnel to safe areas.       |
| <b>Environmental</b>             | Prevent leakage or spillage from entering drains, sewers, or waterways.                                 |
| <b>Containment &amp; Cleanup</b> | Absorb with inert material. Collect in appropriate waste container. Dispose per applicable regulations. |

### 7. HANDLING AND STORAGE

|                      |                                                                                                                                                                                                                                   |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Safe Handling</b> | Use with adequate ventilation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Keep container closed when not in use.                                                                                |
| <b>Safe Storage</b>  | Store in a cool, dry, well-ventilated area away from heat, sparks, and open flame. Keep away from incompatible materials (see Section 10). Keep containers tightly closed. Ground and bond containers when transferring material. |

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Use adequate ventilation. Provide eyewash stations and quick-drench showers accessible to areas of use.

**Occupational Exposure Limits:**

| AGENCY    | EXPOSURE LIMIT           |
|-----------|--------------------------|
| OSHA PEL  | 100 ppm TWA              |
| NIOSH REL | 50 ppm TWA / 75 ppm STEL |
| IDLH      | 500 ppm                  |

|                   |                                                                                                                                                         |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eyes</b>       | Wear chemical safety goggles or face shield.                                                                                                            |
| <b>Skin</b>       | Wear chemical-resistant gloves and protective clothing.                                                                                                 |
| <b>Inhalation</b> | Use a NIOSH-approved respirator with organic vapor cartridges. For confined spaces or exposures above the OEL, use supplied-air respiratory protection. |

Exposure limits sourced from NIOSH Pocket Guide and OSHA 29 CFR 1910.1000. Hazard classification from ECHA Classification and Labelling Inventory (CLP Annex VI).

**9. PHYSICAL AND CHEMICAL PROPERTIES**

|                                 |                                                     |
|---------------------------------|-----------------------------------------------------|
| <b>Appearance</b>               | Clear, volatile liquid with sharp ketone odor       |
| <b>Odor</b>                     | Pleasant odor                                       |
| <b>Particle Characteristics</b> | Not Applicable                                      |
| <b>pH</b>                       | Not Available                                       |
| <b>Melting Point</b>            | -120.5 °F (NTP, 1992)                               |
| <b>Boiling Point</b>            | 243 to 244 °F at 760 mmHg (NTP, 1992)               |
| <b>Flash Point</b>              | 73 °F (NTP, 1992)                                   |
| <b>Vapor Pressure</b>           | 5 mmHg at 67.5 °F ; 10 mmHg at 86.0 °F (NTP, 1992)  |
| <b>Specific Gravity</b>         | 0.798                                               |
| <b>Solubility</b>               | Partial water solubility, excellent organic solvent |
| <b>Molecular Formula</b>        | C <sub>6</sub> H <sub>12</sub> O                    |
| <b>Molecular Weight</b>         | 100.16 g/mol                                        |

**10. STABILITY AND REACTIVITY**

|                               |                                                                               |
|-------------------------------|-------------------------------------------------------------------------------|
| <b>Chemical Stability</b>     | Stable under recommended storage conditions.                                  |
| <b>Hazardous Reactions</b>    | None under normal processing conditions.                                      |
| <b>Conditions to Avoid</b>    | Heat, sparks, open flame, and incompatible materials.                         |
| <b>Incompatible Materials</b> | Strong oxidizing agents, sources of ignition, heat.                           |
| <b>Decomposition Products</b> | May produce carbon oxides and other toxic fumes when heated to decomposition. |

**11. TOXICOLOGICAL INFORMATION**

**Acute Toxicity:** See Section 2 for GHS hazard classification.

|             |                                                                                                                                                                |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>IARC</b> | Group 2B — possibly carcinogenic to humans (Methyl isobutyl ketone; IARC agent: Methyl isobutyl ketone, Vol. 101).                                             |
| <b>NTP</b>  | Not listed as carcinogen.                                                                                                                                      |
| <b>OSHA</b> | No substance-specific standard in 29 CFR 1910 Subpart Z; classified as a carcinogen under the Hazard Communication Standard (29 CFR 1910.1200). See Section 2. |

**12. ECOLOGICAL INFORMATION**

|                    |                                                                                                                          |
|--------------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>Ecotoxicity</b> | Algae ErC50: 400 mg/L (96 h, <i>Selenastrum capricornutum</i> ); Fish LC50: 505 mg/L (96 h, <i>Pimephales promelas</i> ) |
| <b>Persistence</b> | Not persistent; volatilizes (air half-life ~30 d) — Readily biodegradable (84% ThBOD, MITI)                              |

|                         |                                       |
|-------------------------|---------------------------------------|
| <b>Bioaccumulation</b>  | log Kow 1.31, BCF 3 (estimated; low)  |
| <b>Mobility in Soil</b> | High soil mobility (estimated Koc 70) |

### 13. DISPOSAL CONSIDERATIONS

Dispose of contents/container in accordance with applicable federal, state, and local regulations. Do not dispose of into drains or waterways.

### 14. TRANSPORT INFORMATION

|                         |                                          |
|-------------------------|------------------------------------------|
| <b>US DOT</b>           | UN1245, Methyl isobutyl ketone, 3, PG II |
| <b>IMDG</b>             | UN1245, Methyl isobutyl ketone, 3, PG II |
| <b>IATA/ICAO</b>        | UN1245, Methyl isobutyl ketone, 3, PG II |
| <b>Marine Pollutant</b> | No                                       |

### 15. REGULATORY INFORMATION

|                           |                                           |
|---------------------------|-------------------------------------------|
| <b>TSCA Inventory</b>     | Listed.                                   |
| <b>SARA 313 (TRI)</b>     | Listed (de minimis 0.1%).                 |
| <b>California Prop 65</b> | Listed (cancer, developmental).           |
| <b>SARA 311/312</b>       | See Section 2 for hazard classifications. |

Data retrieved as of — TSCA Inventory: 2026-09-02; SARA 313 (TRI): 2026-09-02; California Prop 65: 2026-09-02

### 16. OTHER INFORMATION

**Revision Date:** 09/21/2026

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