

MILES® TOLUENE (METHYLBENZENE / TOLUOL)

Safety Data Sheet

SECTION 1: IDENTIFICATION

Product Name: Toluene

CAS No.: 108-88-3 | Formula: C₇H₈

Recommended Use: Solvent for coatings, paints, thinners and adhesives; chemical processing and extraction

Supplier: Miles Lubricants LLC

Emergency Telephone: CHEMTREC 1-800-424-9300 (US)

SECTION 2: HAZARD(S) IDENTIFICATION

GHS Classification: Flam. Liq. 2; Asp. Tox. 1; Skin Irrit. 2; Repr. 2; STOT SE 3 (narcotic effects); STOT RE 2

Signal Word: Danger

Hazard Statements: H225 – Highly flammable liquid and vapor. H304 – May be fatal if swallowed and enters airways. H315 – Causes skin irritation. H336 – May cause drowsiness or dizziness. H361d – Suspected of damaging the unborn child. H373 – May cause damage to organs (central nervous system) through prolonged or repeated exposure.

Precautionary Statements: P202, P210, P233, P240, P241, P260, P264, P271, P280, P301+P310, P303+P361+P353, P304+P340, P331, P403+P235, P501

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Toluene (CAS 108-88-3): ≥99.5%

SECTION 4: FIRST-AID MEASURES

Eye Contact: Flush with water 15+ minutes; seek medical attention if irritation persists.

Skin Contact: Wash with soap and water; may cause dryness/irritation on repeated contact.

Inhalation: Move to fresh air; seek medical attention if dizziness, drowsiness or other symptoms persist.

Ingestion: Do not induce vomiting (aspiration hazard). Call a poison center or doctor immediately.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media: Dry chemical, CO₂, alcohol-resistant foam; water spray to cool containers.

Special Hazards: Highly flammable; vapors are heavier than air and may travel to an ignition source and flash back; containers may rupture when heated.

Firefighter PPE: SCBA and full protective gear for enclosed-space or large fires.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Eliminate ignition sources. Ventilate area. Absorb with inert material; avoid discharge to sewers or waterways (fire/explosion and aquatic hazard).

SECTION 7: HANDLING AND STORAGE

Store in tightly closed containers, cool/well-ventilated area, away from heat/sparks/open flame and oxidizers. Ground/bond containers to control static discharge.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits: OSHA PEL (TWA) 200 ppm, ceiling 300 ppm, 500 ppm 10-minute peak; ACGIH TLV (TWA) 20 ppm.

Engineering Controls: Local exhaust ventilation; explosion-proof equipment.

PPE: Chemical splash goggles; chemical-resistant gloves (Viton or PVA for extended contact); NIOSH-approved respirator if exposure limits may be exceeded.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, colorless liquid | **Odor:** Sweet, aromatic

Boiling Point: 110.6°C (231°F) | **Freezing Point:** -95°C (-139°F)

Specific Gravity: 0.865 @ 20°C | **Flash Point (Closed Cup):** approx. 4°C (40°F)

Vapor Pressure: approx. 21 mm Hg @ 20°C | **Autoignition:** approx. 480°C (896°F)

Solubility in Water: Slightly soluble

SECTION 10: STABILITY AND REACTIVITY

Stable under normal conditions. Avoid heat, sparks, flames, strong oxidizers.

SECTION 11: TOXICOLOGICAL INFORMATION

CNS depressant at high vapor concentrations; irritating to skin; aspiration hazard; suspected reproductive toxicant; prolonged exposure may affect the central nervous system. IARC Group 3.

SECTION 12: ECOLOGICAL INFORMATION

Toxic to aquatic life at high concentrations; do not release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose per local/state/federal regulations; may be regulated as ignitable hazardous waste (D001).

SECTION 14: TRANSPORT INFORMATION

DOT: UN1294, Toluene, Class 3, PG II.

SECTION 15: REGULATORY INFORMATION

Listed on TSCA. Confirm current federal, state and local regulatory status.

SECTION 16: OTHER INFORMATION

This SDS is a general reference compilation and does not replace the manufacturer's or Miles Lubricants LLC's officially issued, lot-specific SDS.