

1949

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MATERIAL SAFETY DATA SHEET
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Phone Number (7:00am-3:00pm, Pacific Time): 800-648-5950 or 775-858-3000
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Abbreviations: n/a, not available or applicable; n/d, not or none determined

SECTION 1 – MATERIAL IDENTIFICATION AND INFORMATION

Components	CAS #	wt%	OSHA PEL – TWA	ACGIH TLV – TWA	OSHA STEL
Methanol	67-56-1	>97	200ppm (260mg/m ³)	200ppm (260mg/m ³)	250ppm (325mg/m ³)
4-Hydroxybenzoic Acid	99-96-7	<3	n/d	n/d	n/d
Sodium Hydroxide	1310-73-2	<0.5	2mg/m ³	2mg/m ³	n/d

Synonyms for methanol: methyl alcohol, wood alcohol
DOT requires that Methanol be labeled “Flammable Liquid, Poison, n.o.s.”, or “Flammable Liquid” and the exemption number.
Methanol: UN1230, DOT Class 3, Reportable Quantity 5000 lbs, Packaging Group II, Air Max Qty 1L (passenger aircraft) or 60L (cargo aircraft only).
Each individual bottle contains 50ml.

CAS# - Chemical Abstract Service Number
OSHA: Occupational Safety and Health Administration
PEL – Permissible Exposure Limit
ACGIH – American Conference of Governmental Industrial Hygienist
TWA – Time-Weighted (8 hour) Average (value to which workers can be exposed for a normal 8 hour day, 40-hr week without ill effects)
TLV – Threshold Limit Value
STEL – Short-term (15 minutes) Exposure Limit

SECTION 2 – PHYSICAL/CHEMICAL CHARACTERISTICS

Appearance: Clear, colorless Liquid (may turn amber with age) Odor: Alcohol
Mixture may leave a white residue if allowed to dry.
Melting Point: -144°F (-68°C) Boiling Point: 149°F (65°C) Specific Gravity: 0.79
Vapor Density (air=1) 1.11 Vapor Pressure: 96mmHg @ 20°C Evaporation Rate (water=1): 4.6
Solubility in water: 100% Water reactivity: none

SECTION 3 – FIRE AND EXPLOSION HAZARD DATA

Material is extremely flammable. Flash Point: 54°F (12°C)
Auto-Ignition Temperature: 867°F (463°C) Flammability Limits in Air: Lower, 6%; Upper, 36%
Extinguisher Media: Foam, dry chemical, CO₂. NFPA Ratings (methanol): Health-1 Flammability-3
Reactivity-0

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Special Fire Fighting Procedures: Wear self-contained breathing apparatus with full facepiece operated in the positive pressure demand mode when fighting fires. Keep container cold with water spray to prevent container rupture due to steam buildup.

Unusual Fire and Explosion Hazards: Vapors may travel along surfaces to distant ignition sources and flash back. Closed containers exposed to heat may explode. Methanol burns with a bluish, almost invisible flame.

SECTION 4 – REACTIVITY HAZARD DATA

Material is stable. Hazardous polymerization will not occur.

Conditions to avoid: Heat, flame and other sources if ignition

Materials to avoid: Strong acids, strong oxidizing agents, strong reducing agents, acid chlorides, acid anhydrides, alkali metals, zinc, aluminum

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, formaldehyde

SECTION 5 – HEALTH HAZARD DATA

Primary exposure routes: Ingestion, inhalation, eye and skin contact, skin absorption
Carcinogen Status: not listed

Health Hazards: Can cause eye and skin irritation. Poisoning may occur from ingestion, inhalation, or skin absorption. May be fatal or cause visual impairment or blindness (which may be permanent) if swallowed. Product cannot be made non-poisonous. Chronic exposure may lead to visual impairment. Methanol: Oral-rat LD50: 5626mg/kg, inhalation-rat LC50: 64000ppm/4hr, skin-rabbit LD50: 15800mg/kg. Human death from ingestion of 30ml of methanol has been reported; usual fatal dose 100-250ml.

Signs and Symptoms of Overexposure: Skin or eye irritation, nausea or other gastrointestinal discomfort, headache, fatigue, visual impairment. Severe exposures can cause vomiting, diarrhea, dizziness, breathing difficulty, low blood pressure, unconsciousness and death. Prolonged skin contact may cause dermatitis.

Medical Conditions Generally Aggravated by Exposure: Disorders of the skin.

EMERGENCY FIRST AID PROCEDURES – Seek medical attention for further treatment or observation if necessary

Eye Contact: Flush with copious amounts of water for 15 minutes

Skin Contact: Wash thoroughly with soap and water

Inhalation: Remove to fresh air

Ingestion: If a person is conscious, give large amounts of water, and induce vomiting ; consult a Physician.

SECTION 6 – CONTROL AND PROTECTIVE MEASURES

Respiratory Protection: Mechanical ventilation

Protective Gloves: Wear chemically compatible gloves

Eye Protection: Wear safety glasses

Other Protective Clothing and Equipment: none

Hygienic Work Practices: Keep away from food. Wash Thoroughly after using. Launder work clothes often.

SECTION 7 – PRECAUTIONS FOR SAFE HANDLING AND USE

Handling Information and Recommendations: Use as intended – that is, dilute with water as a chromatographic mobile phase – to reduce its flammability and health hazards. If diluted to 2LT, as directed, the concentrations of the hazardous components are reduced to 2.5% methanol, and insignificant concentrations of pHBA and sodium Hydroxide.

Steps to be taken if Material is Spilled or Released: Wear gloves and safety glasses. Mop or soak up liquid with vermiculite, paper towels, or other absorbent material. Clean area with sop and water, and rinse well.

Waste Disposal: Can be burned in a chemical incinerator equipped with an afterburner & scrubber. **Always dispose of waste according to local, state and federal regulations.**

Storage Recommendation: Keep container tightly closed and in a cool, dry, well-ventilated flammable liquid storage area until ready to use..

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