



Material Safety Data Sheet

Methanol

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Methanol

OTHER/GENERIC NAMES: Methyl Alcohol, Carbinol, Wood Alcohol

PRODUCT USE: Solvent

MANUFACTURER: Honeywell
1953 South Harvey Street
Muskegon, MI 49442

DISTRIBUTOR: VWR International
1310 Goshen Parkway
West Chester, PA 19380

FOR MORE INFORMATION CALL:
(Monday-Friday, 8:00am-5:00pm)
1-800-932-5000

IN CASE OF EMERGENCY CALL:
(24 Hours/Day, 7 Days/Week)
1-800-424-9300 (USA Only)
For Transportation Emergencies:
1-800-424-9300 (CHEMTREC - Domestic)
1-613-996-6666(CANUTEC- Canada)

NOTE: Emergency telephone numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT NAME</u>	<u>CAS NUMBER</u>	<u>WEIGHT %</u>
Methanol	67-56-1	100

Component Information/Information on Non-Hazardous Components

This product is considered to be hazardous according to the criteria specified in 29 CFR 1910.1200 (Hazard Communication Standard) and the Canadian Controlled Product Regulations.

Trace impurities and additional material names not listed above may also appear in Section 15 toward the end of the MSDS. These materials may be listed for local "Right-To-Know" compliance and for other reasons.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: This product is a clear, volatile, flammable liquid. Has a slight alcoholic odor. Highly flammable. Vapours may form explosive mixtures with air. The product causes irritation of eyes, skin and mucous membranes. Toxic by inhalation, in contact with skin and if swallowed. Methanol can cause blindness. Causes headache, drowsiness or other effects to the central nervous system. Do not allow product to contact skin, eyes and clothing. Do not breathe vapours.



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POTENTIAL HEALTH HAZARDS

SKIN: Toxic in contact with skin. Skin absorption may cause toxic effects similar to those described for inhalation. Repeated or extended contact may cause erythema (reddening of the skin) or dermatitis, resulting from a defatting action on tissue.

EYES: Irritating to eyes. Symptoms include itching, burning, redness and tearing. Prolonged or acute contact may cause eye damage. This product may cause blindness if it is swallowed.

INHALATION: Toxic by inhalation. May cause blindness if inhaled. Vapours may cause drowsiness and dizziness. Inhalation of high vapour concentrations can cause CNS-depression and narcosis. Severe overexposure may produce more serious symptoms, including coma and risk of liver damage.

INGESTION: Toxic if swallowed. May be fatal or cause blindness if swallowed. Ingestion of this product may result in central nervous system effects including headache, sleepiness, dizziness, slurred speech and blurred vision.

DELAYED EFFECTS: Repeated or prolonged exposure may cause damage to the liver and central nervous system. This product may cause adverse reproductive effects. Methyl alcohol can produce damage to the optic nerve and central and motor nerves.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing liver dysfunctions, or eye, skin and/or central nervous system disorders may be aggravated by exposure.

Ingredients found on one of the OSHA designated carcinogen lists are listed below.

<u>INGREDIENT NAME</u>	<u>NTP STATUS</u>	<u>IARC STATUS</u>	<u>OSHA LIST</u>
No component of this product at levels greater than or equal to 0.1% is identified as a carcinogen by ACGIH, IARC, NTP or OSHA.			

4. FIRST AID MEASURES

SKIN: Wash off immediately with soap and plenty of water. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Call a physician immediately.

EYES: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.

INHALATION: Move to fresh air in case of accidental inhalation of vapours. If not breathing, give artificial respiration. If breathing is difficult, give oxygen, provided a qualified operator is available. Call a physician immediately.

INGESTION: DO NOT induce vomiting. Immediate medical attention is required.

ADVICE TO PHYSICIAN: Treat symptomatically.



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5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: 52°F (11°C)
FLASH POINT METHOD: Closed Cup
AUTOIGNITION TEMPERATURE: 867°F (464°C)
UPPER FLAME LIMIT (volume % in air): 36
LOWER FLAME LIMIT (volume % in air): 6
FLAME PROPAGATION RATE (solids): Not applicable
OSHA FLAMMABILITY CLASS: Class 1B Flammable Liquid

EXTINGUISHING MEDIA:

Use alcohol-resistant foam, carbon dioxide (CO₂) or dry chemical.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Highly flammable. Vapours may form explosive mixtures with air. Vapours are heavier than air and may travel along the ground to some distant source of ignition and flash back. Suppress (knock down) gases/vapours/mists with a water spray jet.

Hazardous combustion products may include carbon monoxide, formaldehyde, and carbon dioxide (CO₂).

SPECIAL FIRE FIGHTING PRECAUTIONS/INSTRUCTIONS:

Water may be ineffective. Do not use a solid water stream as it may scatter and spread fire. Fire or intense heat may cause violent rupture of packages. Fire-fighters should wear self-contained, NIOSH-approved breathing apparatus and full protective clothing. In the event of fire, cool tanks with water spray. After fire, flush area with water to prevent re-ignition. Do not allow run-off from fire fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

IN CASE OF SPILL OR OTHER RELEASE:

Containment Procedures: Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Stop flow of material, if this is without risk.

Cleanup Procedures: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Shovel into suitable container for disposal. Do not use sparking tools. Do not allow product to enter sewer or waterways.

Evacuation Procedures: Keep unnecessary people away. Isolate area.

Special Procedures: Use personal protective equipment. Remove all sources of ignition.

Spills and releases may have to be reported to Federal and/or local authorities. See Section 15 regarding reporting requirements.



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7. HANDLING AND STORAGE

NORMAL HANDLING: (Always wear recommended personal protective equipment.)

Ensure all equipment is electrically grounded before beginning transfer operations. Ensure adequate ventilation. Do not allow product to contact skin, eyes and clothing. Do not breathe vapours. Keep away from fire, sparks and heated surfaces. Keep container tightly closed in a dry and well-ventilated place. Not for human consumption.

STORAGE RECOMMENDATIONS:

Keep in a well-ventilated place. Empty containers may retain product residue including Flammable or Explosive vapours. Do not cut, drill, grind, or weld near full, partially full, or empty product containers. Keep away from heat and sources of ignition. Store away from incompatible substances. Re-open used containers with caution. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in area designed for storage of flammable liquids. Protect from physical damage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapours or mists generated from the handling of this product or use product in closed system. Local exhaust ventilation is preferred. Prevent electrostatic charge build-up by using common bonding and grounding techniques.

PERSONAL PROTECTIVE EQUIPMENT

SKIN PROTECTION:

Wear impervious gloves and impervious flame retardant antistatic protective clothing. Gloves must be inspected prior to use. For leak, spills, or other emergency, use full protective equipment.

EYE PROTECTION:

Wear chemical goggles and face shield. Remove contact lenses.

RESPIRATORY PROTECTION:

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

ADDITIONAL RECOMMENDATIONS:

Provide eyewash stations and quick-drench shower facilities. High standards of skin care and personal hygiene should be exercised at all times.



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EXPOSURE GUIDELINES

Component Exposure Limits

Methanol (67-56-1)

ACGIH:	200 ppm TWA 250 ppm STEL Skin - potential significant contribution to overall exposure by the cutaneous route
OSHA (Final):	200 ppm TWA; 260 mg/m ³ TWA
OSHA (Vacated):	200 ppm TWA; 260 mg/m ³ TWA 250 ppm STEL; 325 mg/m ³ STEL Prevent or reduce skin absorption
NIOSH:	200 ppm TWA; 260 mg/m ³ TWA 250 ppm STEL; 325 mg/m ³ STEL Potential for dermal absorption
Alberta:	200 ppm TWA; 262 mg/m ³ TWA 250 ppm STEL; 328 mg/m ³ STEL Substance may be readily absorbed through intact skin
British Columbia:	200 ppm TWA 250 ppm STEL Skin notation
Manitoba:	200 ppm TWA; 260 mg/m ³ TWA 250 ppm STEL; 310 mg/m ³ STEL
New Brunswick:	200 ppm TWA; 262 mg/m ³ TWA 250 ppm STEL; 328 mg/m ³ STEL Skin - potential for cutaneous absorption
Northwest Territories:	200 ppm TWA; 262 mg/m ³ TWA 250 ppm STEL; 328 mg/m ³ STEL Skin notation
Nova Scotia:	200 ppm TWA 250 ppm STEL Skin - potential significant contribution to overall exposure by the cutaneous route
Nunavut:	200 ppm TWA; 262 mg/m ³ TWA 250 ppm STEL; 328 mg/m ³ STEL Skin notation
Ontario:	200 ppm TWAEV; 260 mg/m ³ TWAEV 250 ppm STEV; 325 mg/m ³ STEV Absorption through skin, eyes, or mucous membranes
Quebec:	200 ppm TWAEV; 262 mg/m ³ TWAEV 250 ppm STEV; 328 mg/m ³ STEV Skin designation
Saskatchewan:	262 mg/m ³ TWA; 200 ppm TWA 328 mg/m ³ STEL; 250 ppm STEL
Yukon:	200 ppm TWA; 260 mg/m ³ TWA 250 ppm STEL; 310 mg/m ³ STEL Skin notation

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