



WINDSHIELD WASH SDS

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product Name on Label: PRE MIX WINDSHIELD WASH SOLVENT

Other Identification: NONE

Use of the substance/mixture: Glass Cleaner

Company name : MOORE OIL COMPANY
4033 WEST CUSTER AVE
MILWAUKEE, WI 53209 (414) 462-3200

Emergency number: (800) 424-9300 - CHEMTREC

SECTION 2: Hazards identification

Classification of the substance or mixture: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Flammable Liquid, Category 3, Acute toxicity, Oral Category 5, Acute toxicity, Inhalation Category 5, Acute toxicity, Dermal Category 5, Specific Target Organ Toxicity (STOT) following single exposure, Category 2.

Hazard statements – Flammable liquid and vapor, May be harmful if swallowed, May be harmful if inhaled, May cause skin irritation, May cause damage to organs- liver, kidneys, central nervous system and optic nerve.



Label elements: WARNING - FLAMMABLE

Other hazards: Flammable liquid and vapor, May be harmful if swallowed, May be harmful if inhaled, May cause skin irritation, May cause damage to organs- liver, kidneys, central nervous system and optic nerve.

Unknown acute toxicity (GHS-US): none.

SECTION 3: Composition/information on ingredients

Mixture - specific concentrations are a trade secret.

NAME	PRODUCT IDENTIFIER	% BY WT
Methyl Alcohol (Methanol)	67-56-1	25-35
Ethylene Glycol	107-21-1	0-5
Non-hazardous ingredients	N/A	65-75

SECTION 4: First aid measures

Description of first aid measures

First-aid measures general	Inhalation may cause headache, dizziness, drowsiness, nausea, visual impairment, narcosis and unconsciousness. Methyl Alcohol may be absorbed through the skin in harmful amounts. Poisonous if swallowed.
First-aid measures after inhalation	Remove the victim to fresh air. If breathing has stopped administer artificial respiration. If breathing is difficult, have medical personnel administer oxygen. Get immediate medical attention.
First-aid measures after skin contact	Remove contaminated clothing. Immediately wash contacted area thoroughly with soap and water. If



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	irritation persists, get medical attention.
First-aid measures after eye contact	Immediately flush eyes with large amounts of water for 15 minutes. Get medical attention if irritation persists.
First-aid measures after ingestion	Seek immediate medical attention. Immediately call local poison control center or go to an emergency department. Never give anything by mouth to or induce vomiting in an unconscious or drowsy person.

Most important symptoms and effects, both acute and delayed: Exposure may aggravate acute or chronic asthma, emphysema and bronchitis.

Potential acute health effects: Eye contact - Can cause irritation to eyes and mucous membranes.

Inhalation - Sore throat, shortness of breath, coughing and congestion. Skin contact - Irritation, itching, dermatitis. Ingestion - Irritation to mucous membranes

Indication of any immediate medical attention and special treatment needed: Seek immediate medical attention for ingestion; or prolonged or excessive dermal exposures.

SECTION 5: Fire-fighting measures

Extinguishing media

Suitable extinguishing media: SMALL FIRE: Use DRY chemical powder, CO₂ or appropriate foam.

LARGE FIRE: Use water spray, fog or foam.

Unsuitable extinguishing media: Do not use water jet.

Special hazards arising from the substance or mixture: Vapors may travel back to ignition source. Closed containers exposed to heat may explode. Products of combustion are carbon oxides (CO, CO₂).

Methanol-water mixtures will burn unless very dilute. Flame is invisible in daylight. Vapors are heavier than air and may flow along surfaces to distant ignition sources and flashback. Burning may produce carbon monoxide and carbon dioxide

Advice for firefighters - Firefighting instructions : Do not release runoff from fire control methods to sewers or waterways. Protection during firefighting: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures: Eliminate all ignition sources. Ventilate area. Wear appropriate protective clothing and equipment.

Environmental precautions: Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including: the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits. Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Shut off ignition sources; including electrical equipment and flames. Do not allow smoking in the area.



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Methods and material for containment and cleaning up: Collect with absorbent material and place in a container suitable for flammable waste.

SECTION 7: Handling and storage

Precautions for safe handling: Keep away from heat, sparks, open flames, hot surfaces. No smoking. Conditions for safe storage, including any incompatibilities: Keep container tightly closed. Ground or bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting, etc. equipment. Use only non-sparking tools. Take precautionary measures against static discharge. No not breathe dust, fumes, gas, mist, vapors or spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves, clothing, and eye and face protection. Keep container tightly closed in a cool, well-ventilated place. Keep away from oxidizing materials and strong acids. Store in a well-ventilated area. Keep cool. Keep in an area suitable for flammable liquids.

SECTION 8: Exposure controls/personal protection

Control parameters:

Methyl Alcohol (Methanol)	200 ppm TWA OSHA PEL 200 ppm TWA ACGIH TLV skin 250 ppm STEL ACGIH TLV
Ethylene Glycol	100 mg/m ³ Ceiling ACGIH TLV

Exposure controls

Hand protection: Chemical resistant gloves such as butyl rubber or Viton where contact is possible. Appropriate protective clothing as needed to minimize skin contact.

Eye Protection: Splash proof goggles are recommended to prevent eye contact.

Respiratory Protection: For operations where the TLV is exceeded a NIOSH approved supplied air respirator or positive pressure self-contained breathing apparatus is recommended. Organic vapor cartridge respirators are not recommended for methanol vapor exposures. Equipment selection depends on contaminant type and concentration. Select and use in accordance with 29 CFR 1910.134 and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

SECTION 9: Physical and chemical properties

Physical state: Blue liquid	Odor: Alcohol
Odor threshold: Not determined	pH: 8.2
Specific Gravity: 0.952	Melting point: -30 C
Boiling point: 93 C	Flash point: 59 C
Evaporation rate (BuAc=1): 5.9	Flammability (solid, gas): Yes
Lower and upper explosive (flammable) limits: LEL 6%, UEL 36%	
Vapor pressure: 97 hPa at 20 C	Vapor density (Air=1): 1.11
Solubility: Soluble in water	Partition coefficient: n-octanol/water: Not Established
Auto-ignition temperature: Not Applicable	Decomposition temperature: Not Established
Viscosity: Not determined	VOC%: 7

SECTION 10: Stability and reactivity

Reactivity: Stable under recommended storage conditions.

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: Reaction with strong oxidizers will generate heat.

Conditions to avoid (e.g., static discharge, shock, or vibration): Temperatures above the flash point and avoid excessive heat, open flame or other sources of ignition.



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Incompatible materials: Strong acids, Strong oxidizing agents, Strong reducing agents, Magnesium, Water-reactive materials

Hazardous decomposition products: Combustion will produce carbon monoxide, carbon dioxide.

SECTION 11: Toxicological information

ACUTE HAZARDS:

INHALATION: May cause irritation of the nose and throat with headache, particularly from mists. High vapor concentrations may produce nausea, vomiting, headache, dizziness, drowsiness, tingling, numbness and shooting pains in the hands and forearms, and visual disturbances.

SKIN CONTACT: Prolonged contact with the skin may cause redness and defatting of the skin and absorption of harmful amounts of methanol.

EYE CONTACT: Liquid, vapors or mist may cause discomfort in the eye with persistent conjunctivitis, seen as slight excess redness or conjunctiva. Serious corneal injury is not anticipated.

INGESTION: Contains methanol and ethylene glycol. May cause abdominal discomfort or pain, nausea, vomiting, dizziness, drowsiness, headache, malaise, blurring of vision, irritability, back pain, decrease in urine output, kidney failure, and central nervous system effects, including irregular eye movements, convulsions and coma. Visual effects from methanol include blurred vision, double vision, changes in color perception, restriction of visual fields and complete blindness. Cardiac failure and pulmonary edema may develop. Severe kidney damage which may be fatal follows the swallowing of large volumes of ethylene glycol. Signs of renal insufficiency may be delayed 36 to 48 hours post ingestion. A few reports have been published describing the development of weakness of the facial muscles, diminishing hearing, and difficulty with swallowing, during the late stages of severe poisoning. Cardiogenic pulmonary edema can also occur from ethylene glycol poisoning.

With massive overdoses of methanol, liver, kidney and heart muscle injury have been described. There may be a delay of 6-12 hours between swallowing methanol and the onset of signs and symptoms. Ingestion of moderate quantities of methanol also produces metabolic acidosis. 60-200 ml of methanol is a fatal dose for most adults. Ingestion of as little as 10 ml may cause blindness.

CHRONIC EFFECTS: Prolonged or repeated inhalation exposure may produce signs of central nervous system involvement, including nausea, vomiting, headache, ringing in the ears, dizziness, vertigo, cloudy and double vision. Prolonged overexposure at levels of 800-1000 ppm may result and in severe eye damage. Prolonged or repeated skin contact may cause skin sensitization and an associated dermatitis in some individuals. Ethylene glycol has been found to cause birth defects in laboratory animals. The significance of this finding to humans has not been determined.

CARCINOGENICITY LISTING: None of the components of these products is listed as a carcinogen or suspected carcinogen by IARC, NTP, ACGIH or OSHA.

ACUTE TOXICITY VALUES:

Calculated ATE for product: ATE Oral: 250 mg/kg

ATE Dermal: 750 mg/kg

ATE Inhalation: 7.5 mg/L

Methanol: LD50 Oral rat 5,628 mg/kg

LC50 Inhalation rat 64,000 ppm/4 hr.

LD50 Dermal rabbit 15,800 mg/kg

Ethylene Glycol: LD50 Oral Rat: 4,700 mg/kg

LD50 Skin Rabbit: 9,530 mg/kg

SECTION 12: Ecological information

Eco-toxicity (aquatic and terrestrial, where available):

Methanol: LC50 Fathead minnows 29,400 mg/L/96 hr.



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EC50 Daphnia magna >10,000 mg/L/24 hr.
Ethylene Glycol: LC50 Fathead Minnow <10,000 mg/L/96 hr.
EC50 Daphnia Magna 100,000 mg/L/48 hr.
Bacterial (Pseudomonas putida): 10,000 mg/l
Protozoa (Entosiphon sulcatum and Uronema parduczi; Chatton-Lwoff): >10,000 mg/l
Algae (Microcystis aeruginosa): 2,000 mg/l
Green algae (Scenedesmus quadricauda): >10,000 mg/l
Persistence and degradability: Methanol: Readily biodegradable.
Ethylene Glycol is readily biodegradable (97-100% in 2-12 days)
Bio-accumulative potential: Methanol: Estimated BCF of 3 - Potential for bio-concentration in aquatic organisms is low.
Ethylene glycol: A BCF of 10, reported for ethylene glycol in fish, Golden ide (Leuciscus idus melanotus), after 3 days of exposure suggests the potential for bio-concentration in aquatic organisms is low.
Mobility in soil: Methanol: Very high. Ethylene glycol is highly mobile in soil.
Other adverse effects (such as hazardous to the ozone layer): None.

SECTION 13: Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging - Recycle, incinerate, treat or landfill in accordance with all local, state/provincial and federal regulations.

SECTION 14: Transport information

UN number: 1230 UN proper shipping name: Methanol
Transport hazard class(es): 3 Packing group, if applicable: III
Environmental hazards (e.g., Marine pollutant (Yes/No)): No.

SECTION 15: Regulatory information

US Fed Regulations: EPA SARA 311/312 HAZARD CLASSIFICATION: Acute health, chronic health, fire hazard.
EPA SARA 313: This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): Methanol 67-56-1 15-40% Ethylene Glycol 107-21-1 0-5%
PROTECTION OF STRATOSPHERIC OZONE: This product is not known to contain or to have been manufactured with ozone depleting substances as defined in 40 CFR Part 82, Appendix A to Subpart A.
CERCLA SECTION 103: Spills of this product over the RQ (reportable quantity) must be reported to the National Response Center. The RQ for the product, based on the RQ for Methanol (40% maximum) of 5,000 lbs, is 12,500 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.
EPA TSCA INVENTORY: All of the components of this material are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

SECTION 16: Other information

Notice to reader - To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of the suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.