

Safety Data Sheet

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Polar Zone – 45C

Synonym: Windshield Washer fluid

Product Use: It is mixture of water/methanol for cleaning windshield

Product Number(s): 97-0725

Company Identification:

Crevier Lubrifiants Inc.
2320 De la Metropole
Longueuil, Québec J4G 1E6
Canada

In case of emergency, please contact Crevier Lubrifiants Inc at:

Phone : 1-800-363-0590 or 450-679-8866

24-Hour Emergency Telephone Number (CANUTEC): (613) 996-6666

Product Information

Product Information: 1-800-363-0590

MSDS Requests: 1-800-363-0690

SECTION 2 HAZARDS IDENTIFICATION

Classification

H226 - Flammable liquid - Category 3;

H301 - Acute toxicity (Oral) - Category 3;

H316 - Skin irritation - Category 3;

H320 - Eye irritation - Category 2B;

H370 - Specific target organ toxicity (single exposure) - Category 1

Label Elements



Signal Word: Danger

Hazard Statement(s):

H226 - Flammable liquid and vapour.

H301 - Toxic if swallowed.

H316 - Causes mild skin irritation.

H320 - Causes eye irritation.

H370 - Causes damage to organs.

Precautionary Statement(s):**Prevention:**

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 - Keep container tightly closed.

P243 - Take precautionary measures against static discharge.

P260 - Do not breathe fume, mist, vapours, spray.

P264 - Wash hands and skin thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P280 - Wear protective gloves, eye protection.

Response:

P301 + P316 IF SWALLOWED: Get emergency medical help immediately.

P330 Rinse mouth.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P304 + P317 IF INHALED: Get medical help.

P332 + P317 If skin irritation occurs: Get medical help.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P317 If eye irritation persists: Get medical help.

Storage:

P403 - Store in a well ventilated place.

P235 - Keep cool.

P233 - Keep container tightly closed.

P405 - Store locked up.

Disposal:

P501 - Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

Other Hazards

None known.

SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
Methanol	67-56-1	40 -49 %wt
Ethanol	64-17-5	< 1,0 %wt

Information on ingredients that are considered Controlled Products and/or that appear on the WHMIS Ingredient Disclosure List (IDL) is provided as required by the Canadian Hazardous Products Act (HPA, Sections 13 and 14). Ingredients considered hazardous under the OSHA Hazard Communication Standard, 29 CFR 1910.1200, are also listed. See Section 15 for additional regulatory information.

SECTION 4 FIRST AID MEASURES

Eye: Immediately flush eyes with large amounts of water for at least 60 minutes, by the clock, while holding eyelids open. See a physician if irritation persists.

Skin: Wash skin with water immediately and remove contaminated clothing and shoes. Get medical attention if any symptoms develop. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

Ingestion: If swallowed, get immediate medical attention. Do not induce vomiting except on medical advice. Never give anything by mouth to an unconscious person.

Inhalation: Move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if breathing difficulties continue.

Most important symptoms and effects, both acute or delayed

No special treatment. Symptomatic treatment required. Contact the poison control specialist immediately if large amounts have been ingested or inhaled. Immediate medical care or special treatment.

Target organs

Eyes, liver, nervous system.

Special instructions

Intense exposure to methanol, by ingestion or breathing at high concentrations in the air, can cause symptoms within 40 minutes to 72 hours after exposure. Symptoms and signs are usually limited to the central nervous system, eyes and gastrointestinal system. Because of the initial effects on the central nervous system, such as headache, dizziness, lethargy and confusion, this may give the impression of ethanol intoxication. Blurred vision, reduced acuity and photophobia are common effects encountered. Treatment with ipecac or lavage is indicated for any patient who comes within two hours of ingestion. Deep metabolic acidosis occurs in cases of severe poisoning and blood bicarbonate levels are a more adequate measure of severity than methanol levels in the blood. Treatment protocols are available in most major hospitals and timely cooperation with appropriate hospitals is recommended.

Health problems aggravated by exposure to the product

Respiratory disorders.

SECTION 5 FIRE FIGHTING MEASURES

See Section 7 for proper handling and storage.

CAUTION: This product is flammable.

EXTINGUISHING MEDIA: Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.

PROTECTION OF FIRE FIGHTERS:

Fire Fighting Instructions: For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

Combustion Products: CO, CO₂, smoke and irritating vapors as products of incomplete combustion.

Special remarks on fire hazards: Flammable in presence of open flames, spark and heat. Burns by forming an invisible flame. Vapors are heavier than air and may travel considerable distance to sources of ignition and flash back. May accumulate in confined spaces.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Protective Measures: CAUTION! COMBUSTIBLE. Eliminate all sources of ignition in the vicinity of the spill or released vapor. When water evaporate, it produces vapor that will be flammable. Do not smoke, eat or drink in the area where this product is manipulated.

Spill Management: Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. All equipment used when handling the product must be grounded. A vapor suppressing foam may be used to reduce vapors. Use clean non-sparking tools to collect absorbed material. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

Reporting: Report spills to local authorities as appropriate or required.

SECTION 7 HANDLING AND STORAGE

Precautionary Measures: Liquid evaporates and forms vapor (fumes) which can catch fire and burn with explosive force. Do not smoke, eat or drink in the area where this product is manipulated. Wash thoroughly after handling.

General Handling Information: Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

General Storage Information: DO NOT USE OR STORE near heat, sparks, flames, or hot surfaces. USE AND STORE ONLY IN WELL VENTILATED AREA. Keep container closed when not in use.

Container Warnings: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

ENGINEERING CONTROLS:

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

Eye/Face Protection: Where splashing is possible, wear safety glasses with side shields as a good safety practice.

Skin Protection: Wear protective clothing to prevent skin contact. Selection of protective clothing may include gloves, apron, boots, and complete facial protection depending on operations conducted. Suggested materials for protective gloves include: Nitrile Rubber, Polyurethane, Polyvinyl Alcohol (PVA) (Note: Avoid contact with water. PVA deteriorates in water.), Viton.

Respiratory Protection: Determine if airborne concentrations are below the recommended occupational exposure limits for jurisdiction of use. If airborne concentrations are above the acceptable limits, wear an approved respirator that provides adequate protection from this material, such as:

Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

Occupational Exposure Limits:

Component	ACGIH (TLV)	OSHA (PEL)
Pur methanol	200 ppm TWA 250 ppm STEL	200 ppm TWA 260 mg/m ³ TWA

NOTE ON OCCUPATIONAL EXPOSURE LIMITS: Consult local authorities for acceptable provincial values in Canada. Consult the Canadian Standards Association Standard 94.4-2002 Selection, Use and Care of Respirators.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Attention: the data below are typical values and do not constitute a specification.

Color: Blue

Physical State: Liquid

Odor: Alcohol odor

pH: Not Applicable

Freezing Point: - 45 °C (minimum)

Initial boiling point: 64,7 °C

Flash Point: Closed cup > 24 °C (> 75 °F) (Typical)

Evaporation rate : No data available

Auto-ignition temperature: No data available

Flammable limits (pure methanol) : Lower : 6%
Upper : 36%

Vapor Pressure: No Data Available

Vapor Density (Air = 1): No Data Available

Boiling Point: No Data Available

Solubility: Soluble in water

Specific Gravity: 0.92 à 0,935 @ 15 °C

Odor Threshold: No Data Available

Coefficient of Water/Oil Distribution: Completely miscible with water, will separate from oil.

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Incompatibility With Other Materials: May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide (CO₂), formaldehyde.

Hazardous Polymerization: Hazardous polymerization will not occur.

Sensitivity to Mechanical Impact: No.

Conditions to avoid: Heat, open flames, sparks, static discharge and other ignition sources.

SECTION 11 TOXICOLOGICAL INFORMATION

Route of entry:

Skin, Eyes, Ingestion, and Inhalation.

Component	Species	LD 50 Oral	LD 50 Dermal	CL 50 Inhalation
Methanol pur	Rat	1187 - 2769 mg/kg	17100 mg/kg -	22 500 ppm /8 Hrs

Acute toxicity

Numerical measures of toxicity

Acute Toxicity Estimate (ATE) values provided as a reflection of the hazard classification.

The following values are calculated based on methanol data diluted at 50% in water :

ATEmix (oral) 200 mg/kg

ATEmix (dermal) 600 mg/kg

ATEmix (inhalation-vapour) 6 mg/L / 4 hrs

IMMEDIATE HEALTH EFFECTS

Eye Irritation: This product will cause eye irritation.

Skin Irritation: This product will cause skin irritation.

Skin Sensitization: Not available

CHRONIC EXPOSURE:

Chronic toxicity: No data available.

Carcinogenicity: This product is not listed as a carcinogen by ACGIH, IARC, NTP or OSHA.

Mutagenicity / Teratogenicity: No data available to indicate that the product or components present above 0.1% in this product are mutagenic, genotoxic or may cause birth defects.

Reproductive Toxicity: No data available to indicate that the product or components present at greater than 0.1% in this product may cause reproductive toxicity.

Specific Target Organ Toxicity - Single Exposure: Causes damage to organs.

Specific Target Organ Toxicity - Repeated Exposure: No data available.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicological Information:

Ingredients	Ecotoxicity - Fish Species Data	Acute Crustaceans Toxicity:
Methanol	LC50 (Oncorhynchus mykiss) 18 – 20 ml/L (96hrs) LC50 (Pimephales promelas) 19500 - 20700 mg/L (96 hrs) LC50 (Lepomis macrochirus) 15400 mg/L (96 hrs)	EC50 Daphnia Magna (water flea) :18260 mg/L (48hrs)

Persistence and degradability: Readily biodegradable in water (test: 99% OECD).

Bioaccumulative potential : Methanol is not expected to bioaccumulate as the partition coefficient is < 1.

Mobility in soil Mobility in soil is high

Other Information:

No information available.

SECTION 13 DISPOSAL CONSIDERATIONS

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by USEPA under RCRA (40CFR261), Environment Canada, or other State, Provincial, and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

SECTION 14 TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

TC Shipping Description:

UN1986, ALCOHOLS, FLAMMABLE, TOXIC, N.O.S. Class 3 (6.1), Packing group III.

Special Precautions : Please note: In containers of 250L or less, this product meets the requirements for exemption under TDG regulation special provisions, part 1, section 1.36b: Class 3, Flammable liquids Alcohol Exemption.

Limited Quantities Exemption

Note from manufacturer: For containers less than 5 liters of windshield washer fluid, this product is classified as 'limited quantity'

SECTION 15 REGULATORY INFORMATION

CHEMICAL INVENTORIES:

All components comply with the following chemical inventory requirements: DSL (Canada), TSCA (United States).

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations. (See Hazardous Products Act (HPA), R.S.C. 1985, c.H-3,s.2).

SECTION 16 OTHER INFORMATION

MSDS PREPARATION:

This Material Safety Data Sheet has been prepared by: Robert Maillette, Chemist **Date:** September 5, 2024

Revised date: This is a new SDS.

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	PEL - Permissible Exposure Limit
CAS - Chemical Abstract Service Number	NFPA - National Fire Protection Association (USA)
ACGIH - American Conference of Government Industrial Hygienists	IMO/IMDG - International Maritime Dangerous Goods Code
API - American Petroleum Institute	MSDS - Material Safety Data Sheet
DOT - Department of Transportation (USA)	NTP - National Toxicology Program (USA)
IARC - International Agency for Research on Cancer	OSHA - Occupational Safety and Health Administration

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.