SAFETY DATA SHEET

1. Product And Company Identification

SDS ID: SDS 757
PRODUCT NAME: Prestone® All Season 3-1 Windshield Washer Fluid
PRODUCT NUMBER: AS658, AS6581F, 77330, AS658-55/F, AS658-55/1, AS658-55/1F
FORMULA NUMBER: 2717-63A, 2717-63B

PRODUCT NOT FOR SALE IN CALIFORNIA

MANUFACTURER:
Prestone Products Corporation
69 Eagle Rd.
Danbury, CT 06810

CANADIAN OFFICE:
Prestone Canada
33 MacIntosh Blvd.
Concord, ON L4K 4L5

MEXICO OFFICE:
ASG Operations Mexico S. de R.L. de C.V.
Carretera Mexico Cuautitlan, Kilometro 31.5, Nave Industrial 5,
Loma Bonita, Cuautitlan, Mexico, 54800

MEDICAL EMERGENCIES AND ALL OTHER INFORMATION PHONE NUMBER:
(888)269-0750 (in the US and Canada)
01-800-715-4135 (in Mexico)
TRANSPORTATION EMERGENCY PHONE NUMBER (Chemical Spills and Transport Accidents only):
CHEMTREC 1-800-424-9300 (in the US and Canada) +1 703 741-5970 (outside the US and Canada)

PRODUCT USE: Automobile windshield cleaner/deicer - consumer product
RESTRICTIONS ON USE: None identified

2. Hazards Identification

GHS/HAZCOM 2012 Classification:

Health	Physical
Acute Toxicity Category 3 (Inhalation, Oral, Dermal) Specific Target Organ Toxicity – Single Exposure Category 1 Specific Target Organ Toxicity – Repeated Exposure Category 2	Flammable Liquid Category 3

Label Elements



DANGER!
H226 Flammable liquid and vapor.
H301+H 311+H331 Toxic if swallowed, in contact with skin and if inhaled.
H370 Causes damage to eyes and central nervous system.
H373 May cause damage to kidneys through prolonged or repeated exposure.

Prevention:
P210 Keep away from heat, sparks, open flames, and hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground, or bond container and receiving equipment
P241 Use explosion-proof electrical, ventilating, and lighting equipment.

P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P260 Do not breathe vapors, or spray.
P264 Wash exposed skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves, protective clothing, and eye protection.
Response:
P301+ P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P330 Rinse mouth.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water, or shower.
P312 Call a POISON CENTER or doctor if you feel unwell.
P363 Wash contaminated clothing before reuse
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P311 Call a POISON CENTER, or doctor.
P314 Get medical attention f you feel unwell.
P370 + P378 In case of fire: Use water fog, carbon dioxide, alcohol foam or dry chemical to extinguish.
Storage:
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
Disposal:
P501 Dispose of contents and container in accordance with local and national regulations.

3. Composition/Information on Ingredients

Component	CAS No.	Amount
Non-hazardous Ingredients	Mixture	60-80%
Methyl Alcohol (Methanol)	67-56-1	15-<35%
Ethylene Glycol	107-21-1	0-<1%

The exact concentrations are a trade secret.

4. First Aid Measures

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.

SKIN CONTACT: Remove contaminated clothing. Immediately wash contacted area thoroughly with soap and water. Get medical attention.

EYE CONTACT: Immediately flush eyes with large amounts of water. Get medical attention if irritation persists.

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: Inhalation may cause headache, dizziness, drowsiness, nausea, visual impairment, narcosis and unconsciousness. Toxic if swallowed, inhaled or absorbed through the skin. May cause gastrointestinal pain, nausea and vomiting. Ingestion, inhalation or absorption of methanol through the skin may cause central nervous system effects and damage to the optic nerve. Poisonous if swallowed. Prolonged ingestion of ethylene glycol may cause kidney damage based on animal data.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT, IF NEEDED: Seek immediate medical attention for ingestion; inhalation or skin contact.

NOTES TO PHYSICIAN:

The combination of visual disturbances, metabolic acidosis and an osmol gap is evidence of methanol poisoning. Ethanol is antidotal and its early administration may block the formation of toxic metabolites of methanol. The objective is to rapidly achieve and maintain a blood ethanol level of approximately 100 mg/dl by giving a loading dose of ethanol followed by a maintenance dose. Intravenous administration of ethanol is the preferred route. Ethanol blood levels should be checked frequently. Hemodialysis may be required. Treat acidosis with intravenous sodium bicarbonate. 4-Methyl pyrazole (Fomepizole®), a potent inhibitor of alcohol dehydrogenase, has been used therapeutically to decrease the metabolic consequences of methanol poisoning. Fomepizole® is easier to use clinically than ethanol, does not cause CNS depression or hypoglycemia and requires less monitoring than ethanol. Folic acid may also be administered to enhance the metabolism of formic acid, the toxic metabolite of methanol.

4-Methyl pyrazole (Fomepizole(R)), a potent inhibitor of alcohol dehydrogenase, has been used therapeutically to decrease the metabolic consequences of methanol and ethylene glycol poisoning. Fomepizole is easier to use clinically than ethanol, does not cause CNS depression or hypoglycemia and requires less monitoring than ethanol. Folic acid may also be administered to enhance the metabolism of formic acid, the toxic metabolite of methanol. Additional therapeutic modalities which may decrease the adverse consequences of ethylene glycol metabolism are the administration of both thiamine and pyridoxine.

Pulmonary edema with hypoxia has been described in a number of patients following poisoning with ethylene glycol. Respiratory support with mechanical ventilation may be required.

There may be cranial nerve involvement in the late stages of toxicity from swallowed ethylene glycol. In particular, effects have been reported involving the seventh, eighth and ninth cranial nerves, presenting with bilateral facial paralysis, diminished hearing and dysphagia.

As there are complicated and serious overdoses, we recommend you consult with the toxicologists at your poison control center.

5. Firefighting Measures

SUITABLE EXTINGUISHING MEDIA: Use water fog, carbon dioxide, alcohol foam or dry chemical. Cool fire exposed containers with water.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL: Flammable liquid. 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.

SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored.

6: Accidental Release Measures

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Eliminate all ignition sources. Ventilate area. Wear appropriate protective clothing and equipment (See Section 8).

METHODS AND MATERIALS FOR CONTAINMENT/CLEANUP: Collect with absorbent material and place in a container suitable for flammable waste.

7. Handling and Storage

PRECAUTIONS FOR SAFE HANDLING:

May be fatal or cause blindness if swallowed! Do not swallow. Avoid eye and skin contact. Avoid breathing vapors or mists. Use only with adequate ventilation. Wash exposed skin thoroughly with soap and water after use. Flammable liquid! Keep away from heat, sparks, open flames and all other sources of ignition. Do not smoke during use.

Empty containers retain product residue and may be dangerous. Do not cut, weld, drill, etc. containers, even empty.
Do not reuse empty containers unless properly cleaned.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES: Keep away from heat, sparks, open flames and all other sources of ignition. Store in a cool, well-ventilated area.

NFPA CLASSIFICATION: IC

8. Exposure Controls / Personal Protection

EXPOSURE GUIDELINES

CHEMICAL	EXPOSURE LIMIT
Non-hazardous Ingredients	None Established PEL/TLV
Methyl Alcohol (Methanol)	200 ppm TWA OSHA PEL 200 ppm TWA ACGIH TLV skin 250 ppm STEL ACGIH TLV
Ethylene Glycol	25 ppm TWA, 50 ppm STEL ACGIH TLV (as vapor) 10 mg/m3 TWA ACGIH TLV (as inhalable fraction of the aerosol)

APPROPRIATE ENGINEERING CONTROLS: Use general ventilation or local exhaust as required to maintain exposures below the occupational exposure limits.

RESPIRATORY PROTECTION: For operations where the exposure limit 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.

GLOVES: Chemical resistant gloves such as butyl rubber or Viton where contact is possible.

EYE PROTECTION: Splash proof goggles are recommended to prevent eye contact.

OTHER PROTECTIVE EQUIPMENT/CLOTHING: Appropriate protective clothing as needed to minimize skin contact.

9. Physical and Chemical Properties

APPEARANCE:	Clear orange liquid	ODOR:	Citrus
ODOR THRESHOLD:	160 - 690 ppm (Methanol)	pH:	10.7-10.8
MELTING/FREEZING POINT:	< 28°F (< -33.3°C)	BOILING POINT/RANGE:	180-182°F (82.2-83.3°C)
FLASH POINT:	90°F (32.2°C) Setaflash	EVAPORATION RATE: (Butyl Acetate = 1)	Not determined
FLAMMABILITY (SOLID, GAS)	Not applicable	FLAMMABILITY LIMITS:	LEL: 6.0% (Methanol) UEL: 36% (Methanol)
VAPOR PRESSURE:	Not determined	VAPOR DENSITY (air = 1):	Not determined
RELATIVE DENSITY:	0.9425	SOLUBILITIES	Water: 100%
PARTITION COEFFICIENT (n-octanol/water)	Not determined	AUTOIGNITION TEMPERATURE:	Not determined
DECOMPOSITION TEMPERATURE:	Not determined	VISCOSITY:	Not determined; ~ 1

10. Stability and Reactivity

REACTIVITY: Normally unreactive

CHEMICAL STABILITY: Stable

POSSIBILITY OF HAZARDOUS REACTIONS: Reaction with strong oxidizers will generate heat.

CONDITIONS TO AVOID: Heat, sparks, flames and all other sources of ignition.

INCOMPATIBLE MATERIALS: Strong bases, strong acids, strong oxidizing agents and materials reactive with hydroxyl compounds.

HAZARDOUS DECOMPOSITION PRODUCTS: Combustion will produce carbon monoxide, carbon dioxide.

11. Toxicological Information

POTENTIAL HEALTH EFFECTS:

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.

CARCINOGEN: 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: 287.8 mg/kg
ATE Dermal: 863.5 mg/kg
ATE Inhalation: 8.63 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

12. Ecological Information

ECOTOXICITY:

Methanol:	LC50 Fathead minnows 29,400 mg/L/96 hr. 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 quandricauda) : >10,000 mg/l

PERSISTENCE AND DEGRADABILITY: Methanol: Readily biodegradable. Ethylene Glycol is readily biodegradable (97-100% in 2-12 days).

BIOACCUMULATIVE POTENTIAL: Methanol: Estimated BCF of 3 - Potential for bioconcentration 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 bioconcentration in aquatic organisms is low.

MOBILITY IN SOIL: Methanol: Very high mobility in soil. Ethylene glycol is highly mobile in soil.

OTHER ADVERSE EFFECTS: None

13. Disposal Considerations

Recycle, incinerate, treat or landfill in accordance with all local, state/provincial and federal regulations.

14. Transport Information

U. S. DOT HAZARD CLASSIFICATION (For Ground Shipments Only)
Containers Not Over 5 Liters (1.3 gal.):
PROPER SHIPPING NAME: Flammable Liquid, toxic, n.o.s.
TECHNICAL NAME: Methanol
UN NUMBER: UN1992
HAZARD CLASS/PACKING GROUP: 3 (6.1), III
LABELS REQUIRED: None, Limited Quantity Mark

Containers over 5 Liters:
PROPER SHIPPING NAME: Flammable Liquid, toxic, n.o.s.
TECHNICAL NAME: Methanol
UN NUMBER: UN1992
HAZARD CLASS/PACKING GROUP: 3 (6.1), III
LABELS REQUIRED: 3, 6.1

DOT MARINE POLLUTANTS: This product does not contain Marine Pollutants as defined in 49 CFR 171.8.

IMDG CODE SHIPPING CLASSIFICATION
Shipments with inner packagings 5 L or smaller and gross mass for the package not exceeding 30 kg can be shipped as a

Limited Quantity (see above). This product is exempted from marking the UN number (see IMDG Code 3.4.7)

DESCRIPTION: UN1992, Flammable Liquid, toxic, n.o.s. (contains Methanol), 3 (6.1), PG III, FP 32.2 C, Limited Quantities
ID NUMBER: UN1992
HAZARD CLASS: 3 (6.1)
PACKING GROUP: III
LABELS REQUIRED: Limited Quantity Mark Required
PLACARDS REQUIRED: LIMITED QUANTITIES Mark on Cargo Transport Containers

CANADIAN TDG CLASSIFICATION (For Ground Shipments Only)
DESCRIPTION: UN1230, Methanol Solution, 3 (6.1), PG II
ID NUMBER: UN1230
HAZARD CLASS: 3 (6.1)
PACKING GROUP: II
LABELS REQUIRED: Flammable Liquid and Toxic
PLACARDS REQUIRED: Flammable Liquid and Toxic

IATA/ICAO SHIPPING CLASSIFICATION: These products are not suitable for shipment by air.

15. Regulatory Information

EPA SARA 311/312 HAZARD CLASSIFICATION: Refer to Section 2 for OSHA Hazard Classification

EPA SARA 313: This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements Under SARA Title lll, Section 313 (40 CFR 372):

Methanol	67-56-1	15-<35%
Ethylene Glycol	107-21-1	0-<1%

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 (35% maximum) of 5,000 lbs, is 14,285 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.

CALIFORNIA PROPOSITION 65: Product not for sale in California.

CALIFORNIA AIR RESOURCE BOARD (CARB) CONSUMER PRODUCT REGULATION: Product not for sale in California.

KOREA: All of the ingredients of this product are listed on the Korean Existing Chemical List (KECL).

16. Other Information

NFPA Rating: Fire: 3 Health: 3 Instability: 0

REVISION SUMMARY: Section 14: Updated TDG Classification.

SDS Date of Preparation/Revision: September 17, 2019

This SDS is directed to professional users and bulk handlers of the product. Consumer products are labeled in accordance with Federal Hazardous Substances Act regulations.

While Prestone Products Corporation believes that the data contained herein are factual and the opinions expressed are those of qualified experts regarding the results of tests conducted, the data are not to be taken as a warranty or representation for which Prestone Products Corporation assumes legal responsibility. They are offered for your consideration, investigation and verification. Any use of these data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.