



SAFETY DATA SHEET

1. Product And Company Identification

SDS ID: SDS 834
 PRODUCT: Prestone® -100°F RV Antifreeze (Ethanol)
 PRODUCT NUMBER: AF-225, AF-225/1
 FORMULA NUMBER: 2811-90, 2913-54, 2913-55

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: Antifreeze for water systems in recreational vehicles, boats, vacation homes and swimming pools - consumer product

RESTRICTIONS ON USE: None identified

2. Hazards Identification

GHS Classification:

Health	Physical
Not Hazardous	Flammable Liquid Category 3

Label Elements



WARNING!

H226 Flammable liquid and vapor

Prevention:

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P233 Keep container tightly closed.
- P240 Ground and bond container and receiving equipment
- P241 Use explosion-proof electrical, ventilating and lighting equipment.
- P242 Use non-sparking tools.
- P243 Take action to prevent static discharge.
- P280 Wear protective gloves, eye protection and face protection.

Response:

- P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
- P370 + P378 In case of fire: Use water, alcohol foam, carbon dioxide or dry chemical to extinguish.



Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

Disposal:

P501 Dispose of contents and container in accordance with local and national regulations.

Other Hazards: None known

3. Composition/Information on Ingredients

Component	CAS No.	Amount
Water	7732-18-5	>65%
Ethanol	64-17-5	<32%
Propylene Glycol	57-55-6	0-<5%
Glycerin	56-81-5	0-<5%

The exact concentrations are a trade secret.

4. First Aid Measures

INHALATION: No adverse effects are expected, however, if irritation or other symptoms develop, remove to fresh air. Seek medical attention if symptoms persist.

SKIN CONTACT: Remove contaminated clothing and wash skin with soap and water. Seek medical attention if irritation develops.

EYE CONTACT: Immediately flush with water, holding open eyelids, for several minutes. Seek medical attention if irritation persists.

INGESTION: Rinse mouth with water. Do not induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconscious or convulsing person. Get medical attention.

MOST IMPORTANT SYMPTOMS: May cause eye irritation. Ingestion of large amounts may cause central nervous system effects.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT, IF NEEDED: Seek immediate medical attention for large ingestions.

NOTES TO PHYSICIAN: Following acute ingestion signs of toxicity unlikely. There is no specific antidote. Treatment should be directed at the control of symptoms and the clinical condition.

5. Firefighting Measures

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

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL: Flammable liquid and vapor. 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 PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTERS: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored. Cool exposed container with water spray or fog.



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: 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.

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
Water	None Established
Ethanol	1000 ppm TWA OSHA PEL 1000 ppm STEL ACGIH TLV
Propylene Glycol	None Established
Glycerin (as mist)	15 mg/m ³ TWA OSHA PEL (total dust) 5 mg/m ³ TWA OSHA PEL (respirable fraction)

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

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION: None normally needed. In operations where the occupational exposure limits are exceeded, a NIOSH approved organic vapor respirator appropriate for the form and concentration of the contaminants should be used. Equipment selection depends on contaminant type and concentration. Select and use in accordance with 29 CFR 1910.134 and good industrial hygiene practice.

GLOVES: Chemical resistant gloves such as butyl rubber recommended for prolonged contact. .

EYE PROTECTION: Safety glasses or goggles recommended if splashing is possible.

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

9. Physical and Chemical Properties

APPEARANCE:	Reddish pink liquid	ODOR:	Alcohol odor
ODOR THRESHOLD:	Not determined	pH:	9.10 - 9.22
MELTING/FREEZING POINT:	5 to -9.9°F (-15 to -23.3°C)	BOILING POINT/RANGE:	185.7 to 194.1°F (85.4 to 90.1°C)



FLASH POINT:	86 to 96°F (30 to 35.6°C)	EVAPORATION RATE:	Not determined
FLAMMABILITY (SOLID, GAS)	Not Applicable	FLAMMABILITY LIMITS:	LEL: 2.5% (ethanol) UEL: 19% (ethanol)
VAPOR PRESSURE:	Not determined	VAPOR DENSITY:	Not determined
RELATIVE DENSITY:	0.9637 - 0.9881	SOLUBILITIES	Water: Complete
PARTITION COEFFICIENT (n-octanol/water)	Not determined	AUTOIGNITION TEMPERATURE:	Not determined
DECOMPOSITION TEMPERATURE:	Not determined	VISCOSITY:	Not determined

10. Stability and Reactivity

REACTIVITY: Normally unreactive.

CHEMICAL STABILITY: Stable.

POSSIBILITY OF HAZARDOUS REACTIONS: None known.

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

INCOMPATIBLE MATERIALS: Strong oxidizing agents such as peroxides and strong inorganic acids.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may product oxides of carbon.

11. Toxicological Information

POTENTIAL HEALTH EFFECTS:

ACUTE HAZARDS:

INHALATION: Inhalation may cause upper respiratory tract irritation and central nervous system effects including headache, dizziness, drowsiness confusion and incoordination.

SKIN CONTACT: Prolonged skin contact may cause irritation and drying of the skin.

EYE CONTACT: Direct contact may cause stinging and tearing but no residual injury or discomfort.

INGESTION: Swallowing may cause gastrointestinal irritation, abdominal pain, nausea, vomiting and diarrhea, intoxication, exhilaration, incoordination, slurred speech, ataxia, vertigo, rapid pulse, drowsiness, stupor and unconsciousness.

CHRONIC HAZARDS: Repeated ingestion of ethanol by pregnant mothers has been shown to adversely affect the central nervous system of the fetus, resulting in fetal alcohol syndrome. These effects include mental and physical retardation, disturbances of learning, motor and language deficiencies, behavioral disorders and small head size

CARCINOGENICITY LISTING: None of the components of this product are listed as a carcinogen or suspected carcinogen by IARC, NTP, ACGIH, or OSHA. Ingestion of alcoholic beverages is known to cause cancer in humans (IARC group 1).

ACUTE TOXICITY VALUES:

Ethanol: Oral rat LD50 10,470 mg/kg,
Inhalation rat LC50 117 mg/kg/4 hr

Inhalation rat LC50 >1000 ppm/6 hr,
Dermal rabbit LD50 13120 mg/kg



12. Ecological Information

ECOTOXICITY:

Ethanol: 96 hr LC50 Pimephales promelas 14.2 g/L,
48 hr EC50 daphnia magna >10,000 mg/L,
96 hr EC50 Pseudokirchneriella subcapitata 22,000 mg/L

PERSISTENCE AND DEGRADABILITY: Ethanol is readily biodegradable.

BIOACCUMULATIVE POTENTIAL: Ethanol has an estimated BCF of 3 which suggests the potential for bioconcentration in aquatic organisms is low.

MOBILITY IN SOIL: Ethanol is highly mobility in soil.

OTHER ADVERSE EFFECTS: None known

13. Disposal Considerations

Dispose of product as hazardous waste (ignitable) in accordance with all local, state/provincial and federal regulations.

14. Transport Information

NOTE: The following applies to **Product Number AF225/1** which contains >25% ethanol.

U.S. DOT HAZARD CLASSIFICATION

Containers not over 5 L

PROPER SHIPPING NAME: UN1170, Ethanol solution, 3, PG III, LTD QTY
TECHNICAL NAME: None
UN NUMBER: UN1170
HAZARD CLASS/PACKING GROUP: 3, III
LABELS REQUIRED: LIMITED QUANTITY

Containers over 5 L

PROPER SHIPPING NAME: UN1170, Ethanol solution, 3, PG III
TECHNICAL NAME: None
UN NUMBER: UN1170
HAZARD CLASS/PACKING GROUP: 3, III
LABELS REQUIRED: FLAMMABLE

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

IMDG CODE SHIPPING CLASSIFICATION

Containers not over 5 L

DESCRIPTION: UN1170, Ethanol solution, 3, PG III, FP 30C, LTD QTY
ID NUMBER: UN1170
HAZARD CLASS: 3
PACKING GROUP: III
LABELS REQUIRED: LIMITED QUANTITY
PLACARDS REQUIRED: LIMITED QUANTITY



Containers over 5 L

DESCRIPTION: UN1170, Ethanol solution, 3, PG III, FP 30C
ID NUMBER: UN1170
HAZARD CLASS: 3
PACKING GROUP: III
LABELS REQUIRED: FLAMMABLE
PLACARDS REQUIRED: FLAMMABLE

CANADIAN TDG CLASSIFICATION (For Ground Shipments Only)

Containers not over 5 L

PROPER SHIPPING NAME: UN1170, Ethanol solution, 3, PG III, FP 30C, LTD QTY
TECHNICAL NAME: None
UN NUMBER: UN1170
HAZARD CLASS/PACKING GROUP: 3, III
LABELS REQUIRED: LIMITED QUANTITY

Containers over 5 L

PROPER SHIPPING NAME: UN1170, Ethanol solution, 3, PG III, FP 30C
TECHNICAL NAME: None
UN NUMBER: UN1170
HAZARD CLASS/PACKING GROUP: 3, III
LABELS REQUIRED: FLAMMABLE

NOTE: The following applies to **Product Number AF225** which contains <23% ethanol.

U.S. DOT HAZARD CLASSIFICATION

PROPER SHIPPING NAME: Exempted From HazMat per 49CFR 173.150(e) aqueous solution of alcohol exemption.
TECHNICAL NAME: None
UN NUMBER: None
HAZARD CLASS/PACKING GROUP: Not Applicable
LABELS REQUIRED: None

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

IMDG CODE SHIPPING CLASSIFICATION

DESCRIPTION: This product is not regulated per Special Provision 144.
ID NUMBER: None
HAZARD CLASS: Not applicable
PACKING GROUP: Not applicable
LABELS REQUIRED: None
PLACARDS REQUIRED: None

CANADIAN TDG CLASSIFICATION (For Ground Shipments Only)

PROPER SHIPPING NAME: Exempted from Regulation per Section 1.37.
TECHNICAL NAME: None
UN NUMBER: None
HAZARD CLASS/PACKING GROUP: Not Applicable
LABELS REQUIRED: None



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 the OSHA Hazard Classification.

EPA SARA 313: This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements under SARA Title III, Section 313 (40 CFR 372): None.

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: This product has no RQ. Some states have more stringent reporting requirements. Report all spills in accordance with local, state, and federal regulations.

CALIFORNIA PROPOSITION 65: This product does not contain substances known to the State of California to cause Cancer and/or Reproductive Harm.

EPA TSCA INVENTORY: All of the components of this material are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

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: 1 Reactivity: 0

REVISION SUMMARY: Formula change. Changes to Sections 1, 3, 8, 9, 11, 14 & 15.

SDS Date of Preparation/Revision: September 1, 2021

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.