

SAFETY DATA SHEET**1. Product And Company Identification**

SDS ID: SDS254
PRODUCT NAME: Prestone ® Starting Fluid
PRODUCT NUMBER: AS-237, AS-237PL
FORMULA NUMBER: 13374-84, 2187-126

MANUFACTURER: CANADIAN OFFICE:
Prestone Products Prestone Canada
Corporation 33 MacIntosh Blvd.
69 Eagle Rd. Concord, ON L4K 4L5
Danbury, CT 06810

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 engine starting fluid - consumer use

RESTRICTIONS ON USE: None identified

2. Hazards Identification**GHS/HAZCOM 2012 Classification:**

Health	Physical
Aspiration Hazard Category 1	Flammable Aerosol Category 1
Skin Irritation Category 2	Gases Under Pressure: Compressed Gas
Specific Target Organ Toxicity – Single Exposure Category 3 (nervous system)	

Label Elements**DANGER!**

H222 Extremely flammable aerosol.
H280 Contains gas under pressure; may explode if heated.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.

Prevention:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Pressurized container. Do not pierce or burn, even after use.
P261 Avoid breathing vapors, or spray.



P264 Wash exposed skin thoroughly after handling.

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.

P331 Do NOT induce vomiting.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water

P362 + P364 Take off contaminated clothing and wash it before reuse.

P332 + P313 If skin irritation occurs: Get medical attention.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER, or doctor if you feel unwell.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F.

Disposal:

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

3. Composition/Information On Ingredients

Component	CAS No.	Amount
Heptane	142-82-5	40-70%
Ethyl Ether	60-29-7	30-50%
Carbon Dioxide	124-38-9	5-10%

The exact concentrations are a trade secret.

4. First Aid Measures

INHALATION: If symptoms of exposure develop, remove to fresh air. If breathing becomes difficult, administer oxygen. Administer artificial respiration if breathing has stopped. Seek immediate medical attention.

SKIN CONTACT: Remove contaminated clothing. Wash all affected and exposed areas with soap and water. If irritation or redness persists, seek medical attention.

EYE CONTACT: Exposed eyes should be immediately flushed with copious amounts of water using a steady stream for a minimum of 15 minutes. If irritation, pain, swelling or tearing persist, seek medical attention.

INGESTION: Unlikely route of exposure with an aerosol container. Do NOT induce vomiting. Get immediate medical attention by calling a physician, Poison Control Center or hospital emergency room. If medical advice cannot be obtained, then take the person and product to the nearest medical emergency treatment center or hospital. Rinse mouth out with water. Never give anything by mouth to a person who is unconscious or drowsy.

MOST IMPORTANT SYMPTOMS: May cause eye irritation. Causes skin irritation. Inhalation may cause headache, dizziness, drowsiness, nausea, and unconsciousness. Swallowing may cause nausea, vomiting and diarrhea. This product is an aspiration hazard; product can enter the lungs during swallowing or vomiting and cause lung damage.

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

NOTES TO PHYSICIAN: May produce arrhythmia, especially in a person with an irritable myocardium. Because of possible arrhythmogenic effects, sympathomimetic should be used with caution. Avoid the use of epinephrine.



There is no specific antidote. Treatment should be directed at the control of symptoms and clinical conditions. Artificial ventilation may be required if coma is deep and breathing is shallow.

5. Firefighting Measures

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

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL: Extremely flammable aerosol. Vapors are heavier than air and can travel along surfaces to a remote ignition source and flash back. Aerosol cans may burst in the heat of fire. Burning may produce carbon dioxide, carbon monoxide, and oxides of nitrogen.

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. Protect against rupturing cans.

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 material using non-combustible absorbents and disposal in a container suitable for flammable waste.

7. Handling and Storage

PRECAUTIONS FOR SAFE HANDLING: Extremely flammable! Use only as directed. Keep away from heat, sparks and flames. Do not smoke. Use only with adequate ventilation. Avoid eye and prolonged skin contact. Avoid breathing vapors or mists. Wash thoroughly with soap and water after use. Do not puncture or incinerate containers.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES: Store product below 120°F. Keep product out of direct sunlight. Store in a well-ventilated area.

AEROSOL FIRE PROTECTION LEVEL: Level 3 (NFPA 30B)

8. Exposure Controls / Personal Protection

EXPOSURE GUIDELINES

CHEMICAL	EXPOSURE LIMIT
Heptane	500 ppm TWA OSHA PEL 400 ppm TWA ACGIH TLV 500 ppm STEL ACGIH TLV
Ethyl Ether	400 ppm TWA OSHA PEL 400 ppm TWA ACGIH TLV 500 ppm STEL ACGIH TLV
Carbon Dioxide	5000 ppm TWA OSHA PEL 5000 ppm TWA ACGIH TLV 30,000 ppm STEL ACGIH TLV

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



PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION: None usually required for normal, consumer use. For operations where the exposure limit may be exceeded, NIOSH approved respirator with organic vapor cartridges with a dust/mist prefilter or supplied air respirator is recommended. 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 4H where contact is possible.

EYE PROTECTION: Safety glasses or safety goggles recommended if needed, to prevent eye contact.

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

9. Physical and Chemical Properties

APPEARANCE:	Clear liquid.	ODOR:	Ether
ODOR THRESHOLD:	0.83ppm (ethyl ether)	pH:	Not determined
MELTING/FREEZING POINT:	< -30°F (-34.4°C)	BOILING POINT/RANGE:	95°F (35°C)
FLASH POINT:	-49°F (-45°C)	EVAPORATION RATE: (Butyl Acetate = 1)	23
FLAMMABILITY (SOLID, GAS)	Extremely Flammable Aerosol	FLAMMABILITY LIMITS:	LEL: 1.9% (ethyl ether) UEL: 36% (ethyl ether)
VAPOR PRESSURE:	305 mmHg @ 68 F	VAPOR DENSITY: (Air=1)	2.6
RELATIVE DENSITY:	0.67-0.7	SOLUBILITIES	Water: 4.5%
PARTITION COEFFICIENT (n-octanol/water)	Not determined	AUTOIGNITION TEMPERATURE:	356°F (180°C)
DECOMPOSITION TEMPERATURE:	Not determined	VISCOSITY:	Not determined
AEROSOL FLAME EXTENSION:	Greater than 18 inches	FLASHBACK:	Yes

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 oxidizing agents and reducing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide, carbon monoxide and oxides of nitrogen.

11. Toxicological Information

POTENTIAL HEALTH EFFECTS:

ACUTE HAZARDS:

INHALATION: Inhalation of high concentrations may cause respiratory irritation and central nervous system effects including headache, dizziness, drowsiness, fatigue, incoordination, intoxication and unconsciousness. High vapor concentrations may cause heart rate irregularities.



SKIN CONTACT: May cause irritation, seen as localized reddening and swelling.

EYE CONTACT: Liquid or vapors may be irritating, causing tearing, reddening and swelling of the conjunctiva.

INGESTION: This is an unlikely route of exposure with an aerosol product. Swallowing large amounts may cause central nervous system depression including headache, dizziness, drowsiness, incoordination, fatigue, intoxication and unconsciousness. May cause gastrointestinal irritation resulting in nausea, vomiting and diarrhea. Aspiration into the lungs may occur during ingestion or vomiting, resulting in severe lung injury.

CHRONIC EFFECTS: Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Prolonged and/or repeated skin contact may cause dermatitis.

CARCINOGENICITY LISTING: None of the components is listed as a carcinogen or potential carcinogen by IARC, NTP or OSHA.

ACUTE TOXICITY VALUES:

Calculated ATE for product: ATE Oral: >2,000 mg/kg
 ATE Dermal: >2,000 mg/kg
 ATE Inhalation: >20 mg/L

Heptane: LD50 Oral Rat: >5,000 mg/kg
 LD50 Skin Rabbit: >2,000 mg/kg
 LC50 Inhalation rat: >29.29 mg/L/4hr.

Ethyl Ether: LD50 Oral Rat: 1,200 mg/kg
 LD50 Skin Rabbit: >2,000 mg/kg
 LC50 Inhalation rat: 32,000 ppm/4 hr.

12. Ecological Information

ECOTOXICITY:

Heptane: LC50 Tilapia mossambica (Mozambique tilapia) 375 mg/L/96 hr.
 LC50 Mysidopsis bahia (Opossum shrimp) 0.1 mg/L/96 hr.

Diethyl Ether: LC50 Pimephales promelas (fathead minnow) 2560 mg/L/96 hr.
 EC50; Species: Daphnia magna (Water flea) 165 mg/L for 24 hr.

PERSISTENCE AND DEGRADABILITY: Heptane: Based on 100% degradation after 4 days in water inoculated with gasoline contaminated soil and 100% degradation after 25 days in water inoculated with activated sewage sludge, biodegradation is expected to be an important fate process for n-heptane in water. Diethyl Ether: A biodegradation study of diethyl ether, based on TOC measurements, using an activated sludge seed and an initial diethyl ether concentration of 100 mg/L, indicated 2.5% (6.5%) biodegradation over a period of 4 weeks.

BIOACCUMULATIVE POTENTIAL: Heptane: BCF 2000. This BCF suggests the potential for bio concentration in aquatic organisms is very high. Diethyl Ether: BCF 0.9 - 9.1. This BCF suggest bio concentration in aquatic organisms is low.

MOBILITY IN SOIL: Heptane: Is expected to be immobile in soil. Diethyl Ether: Is expected to have high mobility in soil.

OTHER ADVERSE EFFECTS: May be harmful to the aquatic environment with long lasting effects.



13. Disposal Considerations

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

Do not incinerate container.

14. Transport Information

U.S. DOT HAZARD CLASSIFICATION (For Ground Shipments Only)

PROPER SHIPPING NAME: UN1950, AEROSOLS, CLASS 2.1 LTD QTY

TECHNICAL NAME: N/A

UN NUMBER: UN1950

HAZARD CLASS/PACKING GROUP: 2.1

LABELS REQUIRED: Limited Quantity Mark

Note: Until: 12/31/2020 Consumer commodity, ORM-D is also acceptable.

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

IMDG CODE SHIPPING CLASSIFICATION

DESCRIPTION: UN1950, AEROSOLS, 2.1, (FP -45 C), LTD QTY

ID NUMBER: UN1950

HAZARD CLASS: 2.1

PACKING GROUP: None

LABELS REQUIRED: Limited Quantity

PLACARDS REQUIRED: Limited Quantity Mark

Note: This product is exempted from marking the UN number (see IMDG Code 3.4.5.1)

CANADIAN TDG CLASSIFICATION (For Ground Shipments Only)

PROPER SHIPPING NAME: Limited Quantity

TECHNICAL NAME: None

CLASS: None

UN NUMBER: None

PACKING GROUP: None

IATA/ICAO SHIPPING CLASSIFICATION:

These products are not suitable for shipment by air.

15. Regulatory Information

CERCLA SECTION 103: Spills of this product over the RQ (reportable quantity) must be reported to the National Response Center. The RQ for this product, based on the RQ for Ethyl Ether (50% maximum) of 100 lbs., is 200 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

EPA SARA 311/312 HAZARD CLASSIFICATION: Classified under OSHA Hazcom 2012 GHS classification as per Section 2 of this SDS.

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.



CALIFORNIA PROPOSITION 65: This product does not contain chemicals regulated under California Proposition 65.

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

CANADIAN ENVIRONMENTAL PROTECTION ACT: All of the ingredients are listed on the Canadian Domestic Substances List.

EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES (EINECS): All of the ingredients are listed on the EINECS inventory.

AUSTRALIA: All of the ingredients of this product are listed on the Australian Inventory of Chemical Substances (AICS).

JAPAN: One of the ingredients of this product is not listed on the Japanese Existing and New Chemical Substances (MITI) List.

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

CHINA: All of the ingredients of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).

PHILIPPINES All of the ingredients of this product are listed on the Philippines Inventory of Chemicals and Chemical Substances (PICCS).

TAIWAN: All the components of this product are listed on the Taiwan inventory (TCSI).

16. Other Information

NFPA RATING: FIRE: 4 HEALTH: 2 INSTABILITY: 0

REVISION SUMMARY: Section 15: EPA SARA 311/312 HAZARD CLASSIFICATION, Taiwan Inventory

SDS Date of Preparation/Revision: November 22, 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 the 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 solely 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.