

## MATERIAL SAFETY DATA SHEET

### 1. Product And Company Identification

MSDS ID: MSDS254  
PRODUCT NAME: Prestone ® Starting Fluid  
PRODUCT NUMBER: AS-237  
FORMULA NUMBER: 13374-84, 2187-126

MANUFACTURER:  
Honeywell Consumer Products Group  
39 Old Ridgebury Road  
Danbury, CT 06810-5109

CANADIAN OFFICE:  
Honeywell Consumer Products Group  
3333 Unity Drive  
Mississauga, Ontario L5L 3S6

#### MEDICAL EMERGENCIES AND ALL OTHER INFORMATION PHONE NUMBER:

(800)890-2075 (in the US)  
(800)668-9349 (in Canada)

#### TRANSPORTATION EMERGENCY PHONE NUMBER (Chemical Spills and Transport Accidents only):

CHEMTREC 1-800-424-9300 (in the US)  
CANUTEC (613)996-6666 (in Canada)  
CHEMTREC 1-703-527-3887 (outside US)  
MSDS DATE OF PREPARATION/REVISION: 09/08/09

PRODUCT USE: Automobile engine starting fluid - consumer use

### 2. Hazards Identification

Clear liquid with an ether odor.

### EMERGENCY OVERVIEW

Extremely Flammable Aerosol! Contents under pressure. Heated can may rupture. Vapor can cause flash fire. Eye and skin irritant. Inhalation may cause headache, dizziness, drowsiness, nausea, narcosis and unconsciousness. Deliberate concentration and inhalation of vapors may be fatal.

### 3. Composition/Information On Ingredients

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

(See Section 8 for Exposure Limits)

### 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. 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. Do not induce vomiting. Never give anything by mouth to a person who is unconscious or drowsy.

**NOTES TO PHYSICIAN:** May produce arrhythmia, especially in a person with an irritable myocardium. Because of possible arrythogenic effects, sympathomimetics 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

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

**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.

**UNUSUAL FIRE HAZARDS:** 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.

**HAZARDOUS COMBUSTION PRODUCTS:** Burning may produce carbon dioxide, carbon monoxide, and oxides of nitrogen.

### 6: Accidental Release Measures

Eliminate all ignition sources. Ventilate area. Wear appropriate protective clothing and equipment (See Section 8). Collect with absorbent material and place in a suitable container for flammable waste..

### 7. Handling and Storage

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.  
Store product below 120 F and away from direct sunlight.  
Do not puncture or incinerate containers.

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

### 8. Exposure Controls / Personal Protection

#### EXPOSURE LIMITS

CHEMICAL	EXPOSURE LIMIT
Heptane	500 ppm TWA OSHA PEL 400 ppm TWA ACGIH TLV

Ethyl Ether	500 ppm STEL ACGIH TLV
	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

**VENTILATION:** Use local exhaust as required to maintain exposures below the occupational exposure limits.

**RESPIRATORY PROTECTION:** None usually required for normal, consumer use. For operations where the TLV 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 AND ODOR:** Clear liquid with an ether odor.

pH: Not Applicable	<b>SPECIFIC GRAVITY:</b> 0.67-0.7
<b>BOILING POINT:</b> 95°F (35°C)	<b>VAPOR PRESSURE:</b> 305 mmHg @ 68 F
<b>MELTING POINT:</b> < -30°F (-34.4°C)	<b>VAPOR DENSITY:</b> 2.6
<b>SOLUBILITY IN WATER:</b> 4.5	<b>EVAPORATION RATE:</b> 23
<b>PERCENT VOLATILE:</b> 99%	<b>VISCOSITY:</b> Not determined
<b>FLASH POINT:</b> -49°F (-45°C)	<b>AUTOIGNITION TEMP:</b> 356°F (180°C)
<b>FLAMMABILITY LIMITS LEL:</b> 1.9% (ethyl ether)	<b>UEL:</b> 36% (ethyl ether)
<b>AEROSOL FLAME EXTENSION:</b> Greater than 18 inches	
<b>FLASHBACK:</b> Yes	
<b>COEFFICIENT OF WATER/OIL DISTRIBUTION:</b> Not determined	

## 10. Stability and Reactivity

**STABILITY:** Stable

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

**INCOMPATIBILITY:** Strong oxidizing agents.

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

**HAZARDOUS POLYMERIZATION:** Will not occur.

## 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.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Because of its irritating defatting properties, this material may aggravate an existing skin condition. Existing cardiac conditions may be aggravated if inhaled in high concentrations and may be fatal as a result of serious arrhythmia and cardiac decomposition.

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

**Acute Toxicity Values:**

Heptane: LC50 Inhalation rat LC50: 103 gm/m<sup>3</sup>/4 hr

Ethyl Ether: Oral rat LD50: 1.2 g/kg  
Inhalation mouse LC50: 31000 ppm/30M  
Dermal rabbit LD50: >20 mL/kg

<b>12. Ecological Information</b>
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No ecotoxicity data is available at this time.

<b>13. Disposal Considerations</b>
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Dispose of product as hazardous waste (ignitable) in accordance with all local, state/provincial and federal regulations.

Do not incinerate container.

<b>14. Transport Information</b>
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U.S. DOT HAZARD CLASSIFICATION (For Ground Shipments Only)

PROPER SHIPPING NAME: Consumer Commodity

TECHNICAL NAME: None

UN NUMBER: None

HAZARD CLASS/PACKING GROUP: ORM-D

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: UN1950, AEROSOLS, 2.1, (FP -45 C), LIMITED QUANTITY

ID NUMBER: UN1950

HAZARD CLASS: 2.1

PACKING GROUP: None

LABELS REQUIRED: None

PLACARDS REQUIRED: LIMITED QUANTITIES on Cargo Transport Unit

Note: This product is exempted from marking the UN number (see IMDG Code 3.4.7)

CANADIAN TDG CLASSIFICATION (For Ground Shipments Only)

PROPER SHIPPING NAME: Consumer Commodity (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

EPA SARA 311/312 HAZARD CLASSIFICATION: Acute health, chronic health, fire hazard, sudden release of pressure

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.

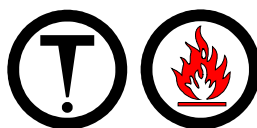
CERCLA SECTION 103: Spills of this product over the RQ (reportable quantity) must be reported to the National Response Center. The RQ for this product, based on the RQ for Ethyl Ether (60% maximum) of 100 lbs, is 166 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

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.

CANADIAN WHMIS CLASSIFICATION: Class D - Division 2 - Subdivision B - (Toxic material causing other chronic effects), Class B - Division 5 (Flammable Aerosol)



CANADIAN WHMIS HAZARD SYMBOLS: Toxic -

This MSDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the MSDS contains all of the information required by the CPR.

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).

<b>16. Other Information</b>
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NFPA RATING - FIRE: 4      HEALTH: 2      REACTIVITY: 0

REVISION SUMMARY: Section 1: Update US information phone number; Update emergency phone numbers; Switched Sections 2 and 3; Updated transport information.

This MSDS 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.

If more information is needed, please contact:

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