

SAFETY DATA SHEET

1. Product And Company Identification
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SDS ID: SDS 446
PRODUCT: PRESTONE® Fuel System Cleaner
 PRESTONE® Complete Fuel System Cleaner
PRODUCT NUMBER: AS-715/R, AS715A, 50072, AS-715
FORMULA NUMBER: 2138-112, 2187-114, 2488-1

MANUFACTURER:
Prestone Products Corporation
Danbury, CT 06810-5109

CANADIAN OFFICE:
FRAM Group (Canada), Inc.
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)

SDS DATE OF PREPARATION/REVISION: 11/15/13

PRODUCT USE: Automobile fuel additive - consumer product
RESTRICTIONS ON USE: None identified

2. Hazards Identification

GHS/HAZCOM 2012 Classification:

Health	Physical
Aspiration Toxicity Category 1 Carcinogen Category 2 Eye Irritant Category 2A Skin Irritant Category 2 Specific Target Organ Toxicity – Single Exposure Category 3	Flammable Liquid Category 3

Label Elements



DANGER!
H226 Flammable liquid and vapor.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation



H319 Causes serious eye irritation
H335 May cause respiratory irritation
H351 Suspected of causing cancer

Prevention:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
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.
P261 Avoid breathing vapors.
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.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P332 + P313 If skin irritation occurs: Get medical attention.
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 + P313 If eye irritation persists: Get medical attention.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308 + P313 IF exposed or concerned: Get medical attention.
P370 + P378 In case of fire: Use foam, carbon dioxide, or dry chemical to extinguish.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.
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
Refined Petroleum Distillates	8052-41-3 8008-20-6 64742-95-6	50-100%
Proprietary Additive	Mixture	15-40%
Xylene	1330-20-7	0-20%
1,2,4 Trimethylbenzene	95-63-6	5-10%
Nonane	111-84-2	0-10%
1,3,5 Trimethylbenzene	108-67-8	1-5%
n-Propylbenzene	103-65-1	1-5%
1,2,3 Trimethylbenzene	526-73-8	1-5%
Cumene	98-82-8	0-5%



Ethylbenzene	100-41-4	0-5%
Naphthalene	91-20-3	<0.5%

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 medical attention.

SKIN CONTACT: Remove contaminated clothing. Immediately wash contacted area thoroughly with soap and water. If irritation persists, get medical attention.

EYE CONTACT: Immediately flush eyes with large amounts of water for 15 minutes. Get medical attention if irritation persists.

INGESTION: Do NOT induce vomiting. Get immediate medical attention by calling a Poison Control Center or hospital emergency room. If medical advice cannot be obtained, take the person and the product to the nearest medical emergency treatment center or hospital. If vomiting occurs spontaneously, keep head below hips to prevent aspiration into the lungs.

MOST IMPORTANT SYMPTOMS: Skin irritant. 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: There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and clinical conditions. A serious potential problem is aspiration pneumonitis, which may lead to non-cardiogenic pulmonary edema. The patient should be observed for signs of lung injury if aspiration is suspected.

5. Firefighting Measures

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

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL: Flammable liquid. Product may form combustible mixtures at temperatures at or below the flashpoint. Runoff to sewer may cause fire or explosion hazard. Vapors are heavier than air and may travel along the ground or be moved by ventilation and be ignited by heat, flame or spark at locations distant from the material handling point. Burning may produce carbon monoxide, carbon dioxide and nitrogen oxides.

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



7. Handling and Storage

PRECAUTIONS FOR SAFE HANDLING:

Harmful or Fatal if Swallowed. Contains petroleum distillates. Avoid contact with eyes, skin and clothing. Avoid breathing vapors. Use only with adequate ventilation. Wash exposed skin thoroughly with soap and water after use. Flammable Liquid! Keep container away from heat, sparks, open flames and all other sources of ignition. Do not smoke during use.

Do not reuse empty containers unless properly cleaned. Empty containers retain product residues and may be hazardous. Do not flame cut, drill, weld, etc. on or near empty containers, even empty.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

Keep containers closed when not in use. Store in a cool, dry area away from heat, oxidizers and all sources of ignition.

NFPA CLASSIFICATION: II

8. Exposure Controls / Personal Protection

EXPOSURE LIMITS

CHEMICAL	EXPOSURE LIMIT
Refined Petroleum Distillates	500 ppm TWA OSHA PEL 100 ppm TWA ACGIH TLV
Proprietary Additive	None Established
Xylene	100 ppm TWA OSHA PEL 100 ppm TWA ACGIH TLV 150 ppm STEL ACGIH TLV
1,2,4 Trimethylbenzene	None Established OSHA PEL 25 ppm TWA ACGIH TLV
Nonane	200 ppm TWA ACGIH TLV
1,3,5 Trimethylbenzene	None Established OSHA PEL 25 ppm TWA ACGIH TLV
n-Propylbenzene	None Established
1,2,3 Trimethylbenzene	None Established OSHA PEL 25 ppm TWA ACGIH TLV
Cumene	50 ppm TWA OSHA PEL skin 50 ppm TWA ACGIH TLV
Ethylbenzene	100 ppm TWA OSHA PEL 100 ppm TWA ACGIH TLV 125 ppm STEL ACGIH TLV
Naphthalene	10 ppm TWA OSHA PEL 10 ppm TWA ACGIH TLV 15 ppm ACGIH STEL

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

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION: For operations where the TLV is exceeded a NIOSH approved organic vapor 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 viton where contact is possible.

EYE PROTECTION: Safety glasses or splash-proof goggles.

OTHER PROTECTIVE EQUIPMENT/CLOTHING: Appropriate protective clothing as needed to minimize skin contact. Suitable washing and eye flushing facilities should be available in the work area. Contaminated clothing should be removed and laundered before re-use.

9. Physical and Chemical Properties

APPEARANCE:	Clear, amber liquid	ODOR:	Hydrocarbon
ODOR THRESHOLD:	20 ppm (Xylene)	pH:	Not determined
MELTING/FREEZING POINT:	Not determined	BOILING POINT/RANGE:	312-360° F (155.56-182.22°C)
FLASH POINT:	105-122°F (40-50°C) Seta flash	EVAPORATION RATE: (Butyl Acetate = 1)	<1
FLAMMABILITY (SOLID, GAS)	Flammable Liquid	FLAMMABILITY LIMITS:	LEL: Not determined UEL: Not determined
VAPOR PRESSURE:	Not determined	VAPOR DENSITY: (Air=1)	Not determined
RELATIVE DENSITY:	<0.99	SOLUBILITIES	Water: Insoluble
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: 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 monoxide, carbon dioxide and nitrogen oxides.

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 headache, dizziness, drowsiness, weakness, nausea, euphoria, fatigue, blurred vision, tremors, convulsions, unconsciousness, respiratory arrest and death.



SKIN CONTACT: Prolonged contact with the skin may cause irritation, defatting of the skin or dermatitis. May cause skin reaction based on tests with laboratory animals.

EYE CONTACT: Liquid, vapors or mist may cause irritation of the eyes with possible injury if not removed promptly.

INGESTION: May cause abdominal discomfort or pain, nausea, vomiting and diarrhea. Swallowing large amounts may cause harmful effects with symptoms similar to those listed under inhalation. Aspiration during swallowing or vomiting may cause lung damage.

CHRONIC EFFECTS: Reports have associated prolonged or repeated overexposure to petroleum distillates with adverse liver, kidney and bone marrow effects and permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the product may be harmful or fatal. Xylene has been found to cause adverse reproductive effects in laboratory animals.

CARCINOGENICITY LISTING: Ethyl benzene and naphthalene are listed as possibly carcinogenic to humans (Group 2B) by IARC and reasonably anticipated to be a carcinogen by NTP. None of the other components greater than 0.1% are listed as a carcinogen by IARC, NTP, ACGIH, or OSHA. (See Section 11 for additional information).

ACUTE TOXICITY VALUES:

Calculated ATE for product: ATE Oral: >2000 mg/kg
 ATE Dermal: >2000 mg/kg
 ATE Inhalation: > 20 mg/L/4 hr.

Refined Petroleum Distillates: LD50 Oral Rat: >2 gm/kg
 LC50 Inhalation Rat: >5,000 mg/m³
 LD50 Skin Rabbit: >2 gm/kg

Xylene: LD50 Oral Rat: 4300 mg/kg
 LD50 Skin Rabbit: >1700 mg/kg
 LC50 Inhalation Rat: 5,000 ppm/4hr

1,2,4-Trimethylbenzene: LD50 Oral Rat: 5 gm/kg
 LC50 Inhalation Rat: 18 gm/m³/4 hr

Nonane: LC50 Inhalation Rat: 32,000 ppm/4 hr.

1,3,5 Trimethylbenzene: LC50 Inhalation Rat: 24 gm/m³/4 hr.

Ethylbenzene: LD50 Oral Rat: 3,500 mg/kg
 LD50 Skin Rabbit: 17,800 uL/kg

Naphthalene: LD50 Oral Rat: 490 mg/kg
 LC50 Inhalation Rat: >340 mg/m³/1 hr
 LD50 Skin Rabbit: >20 gm/kg

12. Ecological Information

ECOTOXICITY:

Refined Petroleum Distillates:

LC50 Fathead Minnow 45 mg/L/96 hr.
LC50: Oncorhynchus mykiss 9.22 mg/L/96 hr.
EC50 Daphnia Magna: 6.14 mg/L/48 hr.

Xylene: LC50 Rainbow Trout 13.5 mg/L/96 hr.
LC50 Fathead Minnow 13.5 mg/L/96 hr.

1,2,4-Trimethylbenzene:
LC50 Fathead Minnow 7.72 mg/L/96 hr.
EC50 Daphnia Magna 6.14 mg/L/48 hr.

1,3,5 Trimethylbenzene:
EC50 Daphnia magna 50 mg/L/ 24 hr.

Ethylbenzene: LC50 Mysidopsis bahia (shrimp) 87.6 mg/L/96 hr.
LC50 Pimephales promelas (fathead minnow) 42.3 - 48.5mg/L/96 hr.

Naphthalene: LC50 Oncorhynchus gorbuscha (pink salmon) 1.4 mg/L/96

PERSISTENCE AND DEGRADABILITY:

1,2,4-Trimethylbenzene: Reached 4-18% of its theoretical BOD in 4 weeks.
1,3,5-trimethylbenzene: 3% of the theoretical BOD was reached in a 5 day BOD test.
Naphthalene: Reached 2% of its theoretical BOD in 4 weeks.
1,2,3-Trimethylbenzene: Present at 100 mg/L, reached 0% of its theoretical BOD in 2 weeks

BIOACCUMULATIVE POTENTIAL:

Nonane: The potential for bio concentration in aquatic organisms is very high. BCF 12000
1,2,4-Trimethylbenzene: Bio concentration in aquatic organisms is moderate to high.
Naphthalene: BCF 23 to 146, these BCF values suggest the potential for bio concentration in aquatic organisms is low to high.
1,2,3-Trimethylbenzene: BCF of 133-217. These BCFs suggest bio concentration in aquatic organisms is high.
1,3,5-trimethylbenzene: BCF values of 23-342 and 42-328 were measured in carp for 1,3,5-trimethylbenzene.

MOBILITY IN SOIL:

Nonane: Is expected to be immobile in soil. Kow 5.65
1,2,4-Trimethylbenzene: Will have low mobility in soil.
1,3,5-trimethylbenzene: Low mobility in soil.
1,2,3-trimethylbenzene is expected to have low mobility in soil.
Naphthalene: Is expected to have moderate to low mobility in soil

OTHER ADVERSE EFFECTS: May be harmful to the aquatic environment.

13. Disposal Considerations



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

14. Transport Information

Transport Status: This product is a consumer product and inner packagings 5 L/1.3 gal capacity or smaller and a gross mass for the package not exceeding 30 kg/66 lbs meet the criteria for shipment as a limited quantity and consumer commodity for both ground and vessel shipment. Because the flashpoint exceeds 37.8°C (100°F) and the product does not meet the definition of any other hazard class and is not a hazardous substance, hazardous waste or marine pollutant, the combustible liquid (flammable liquid for Canada) exception has been taken for US and Canadian ground transportation. This product can be shipped by road and rail as a non-regulated shipment in non-bulk packaging (450 L/119 gal or less) using these exceptions. This exception does not apply to international vessel shipments under the IMDG Code so this product is regulated for shipment by that mode. The IMDG limited quantity provisions apply to shipments with inner packagings 5 L or smaller and gross mass for the package not exceeding 30 kg. Additionally consumer products are exempted from marking of the UN number on the packaging (see IMDG Code 3.4.5.1).

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

PROPER SHIPPING NAME: Excepted from HazMat (49CFR 173.150)

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

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 3.4.5.1).

DESCRIPTION: UN1993, FLAMMABLE LIQUID, N.O.S., (PETROLEUM DISTILLATES, XYLENE), 3, PG III, FP 40 C, LIMITED QUANTITY

ID NUMBER: UN1993

HAZARD CLASS: 3

PACKING GROUP: III

LABELS REQUIRED: LIMITED QUANTITY

PLACARDS REQUIRED: LIMITED QUANTITY MARK

CANADIAN TDG CLASSIFICATION (For Ground Shipments Only)

PROPER SHIPPING NAME: Excepted from Regulation (Section 1.33)

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

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

Xylene	1330-20-7	0-20%
1,2,4 Trimethylbenzene (Pseudocumene)	95-63-6	5-10%
Ethylbenzene	100-41-4	0-5%
Cumene	98-82-8	0-5%
Naphthalene	91-20-3	<0.5%

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.

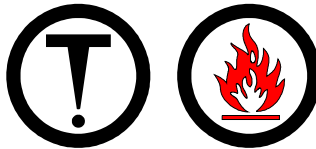
CERCLA SECTION 103: Spills of this product over the RQ (reportable quantity) must be reported to the National Response Center. The RQ for the product, based on the RQ for Xylene (20% maximum) of 100 lbs, is 500 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

CALIFORNIA PROPOSITION 65: This product contains less than 0.5% naphthalene which is known to the State of California cause cancer. This product contains 0-5% ethylbenzene which is known to the State of California to cause cancer.

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 A (Very toxic material causing other toxic effects), Class B - Division 3 (Combustible Liquid)



CANADIAN WHMIS HAZARD SYMBOLS:

This SDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the SDS 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:

Formula 2138-112: All of the ingredients of this product are listed on the Australian Inventory of Chemical Substances.

KOREA:

Formula 2138-112: All of the ingredients of this product are listed on the Korean Existing Chemicals List (KECL).

Formula 2187-114: All of the ingredients of this product are listed on the Korean Existing Chemicals List (KECL).

Formula 2488-1: All of the ingredients of this product are listed on the Korean Existing Chemicals List (KECL).

CHINA:

Formula 2138-112: All of the ingredients of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).

Formula 2187-114: All of the ingredients of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).



Formula 2488-1: All of the ingredients of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).

PHILIPPINES:

Formula 2187-114: All of the ingredients of this product are listed on the Philippine Inventory of Chemical and Chemical Substance (PICCS)

Formula 2488-1: All of the ingredients of this product are listed on the Philippine Inventory of Chemical and Chemical Substance (PICCS)

16. Other Information

NFPA Rating: Fire: 2

Health: 2

Reactivity: 0

REVISION SUMMARY: All Sections – conversion to Hazcom 2012 classification and labeling and format.

SDS Date of Preparation/Revision: November 15, 2013

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.

If more information is needed, please contact:

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