

## MATERIAL SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Product Identification

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Product Name: FPS Premium Home Heat  
Synonyms: Diesel fuel additive  
Chemical Name: Proprietary Mixture  
Chemical Family: Diesel Fuel Additive  
CAS Number: Blend

#### Company Identification

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Manufactured for:  
Fuel Performance Solutions  
P.O Box 903  
Chesterton, IN 46304 USA  
1-888-577-3835 (For product information)

For chemical emergency ONLY (spill, leak, fire, exposure or accident), Call  
CHEMTREC at 1-800-424-9300

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

#### COMPONENT LISTING:

Chemical Name	Amount	CAS Number
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HEAVY AROMATIC SOLVENT NAPHTHA	60.0 - 80.0 %	64742-94-5
METHYLCYCLOPENTADIENYL-MANGANESE TRICARBONYL	< 5.0 %	12108-13-3
NAPHTHALENE	< 10.0 %	91-20-3
1,2,4-TRIMETHYLBENZENE	1.0 - 5.0 %	95-63-6
XYLENE	1.0 - 5.0 %	1330-20-7
AMINE REACTION PRODUCTS	< 3.0 %	84605-20-9
ETHYLBENZENE	< 0.5 %	100-41-4
VINYL ACETATE MONOMER	< 0.1 %	108-05-4

(See Section 8 for exposure guidelines)

(See Section 15 for regulatory information)

SARA 311 Categories:

Immediate (Acute) Health Effects....: Yes  
Delayed (Chronic) Health Effects....: Yes  
Fire Hazard.....: Yes  
Sudden Release Of Pressure Hazard...: No  
Reactivity Hazard.....: No

**3. HAZARDS IDENTIFICATION**

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***** EMERGENCY OVERVIEW *****  
*  
* WARNING *  
*  
* TOXIC IF SWALLOWED. CAUSES RESPIRATORY TRACT *  
* IRRITATION. FLAMMABLE LIQUID AND VAPOR. VAPOR MAY *  
* CAUSE FLASH FIRE. *  
* *  
*****
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HMIS Rating - Health: 2  
Flammability: 2  
Reactivity: 0

NFPA Rating - Health: 2  
Flammability: 2  
Reactivity: 0

POTENTIAL HEALTH EFFECTS

EYE:  
May cause slight irritation.

SKIN:  
May cause skin irritation.

INHALATION:  
Vapor inhalation and/or skin absorption can cause central nervous system effects, including dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and death. Chronic exposures may cause hearing loss, irregular heart rhythms and potential cardiac arrest.

Moderately irritating to respiratory tract.

**INGESTION:**

Toxic if swallowed.

Liquid can directly enter the lungs when swallowed or vomited. Serious lung damage and possibly fatal chemical pneumonia can develop if this aspiration occurs.

**SIGNS AND SYMPTOMS OF EXPOSURE:**

Effects of overexposure may include eye and skin irritation, irritation of the nose and throat. Central nervous system effects include dizziness, headache, drowsiness, loss of coordination, fatigue, giddiness, loss of appetite and abdominal pain. Symptoms of ingestion include irritation of digestive tract, nausea, vomiting and diarrhea.

**CARCINOGENICITY INFORMATION:**

The National Toxicology program has reported a chronic inhalation study in rats of naphthalene, a minor component of this product. Naphthalene caused severe inflammation and an increase in tumors of the nasal epithelium in both sexes. NTP considered this to be clear evidence of carcinogenic activity in rats. The relevance to the inhalation toxicity of this product in humans is unknown.

Vinyl Acetate Monomer has been classified by the International Agency for Research on Cancer as possibly carcinogenic to humans (Group 2B).

Ethylbenzene has been classified by IARC as a possible human carcinogen (Group 2B) on the basis of sufficient evidence of carcinogenicity in experimental animals, but inadequate evidence in exposed humans.

**TARGET ORGAN:**

Target organs: Blood, Kidneys, Lungs, Liver, Heart, Brain, Gastrointestinal Tract, Upper Respiratory Tract, Skin, Eyes, Central Nervous System (CNS), Testes.

#### **4. FIRST AID MEASURES**

**EYE CONTACT FIRST AID:**

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Remove any contact lenses if worn. Get medical attention immediately.

SKIN CONTACT FIRST AID:

Wash skin with plenty of soap and water while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists. Wash clothing separately before reuse.

INHALATION FIRST AID:

Remove to fresh air.

If not breathing, give artificial respiration and contact a physician immediately. If breathing is difficult, administer oxygen and contact a physician immediately.

INGESTION FIRST AID:

Get immediate medical attention. If fully conscious, have the victim rinse mouth with water, and then drink one glass of water. Never give anything by mouth to an unconscious person.

If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

If medical attention is not available within one hour of ingestion, induce vomiting by sticking finger down throat.

NOTES TO PHYSICIAN:

If ingestion has occurred within the past one hour, protect the airway and perform gastric lavage followed by the administration of activated charcoal. If greater than one hour since ingestion, protect the airway as needed and administer activated charcoal.

Activated charcoal mixture may be administered. To prepare activated charcoal mixture, suspend 50 grams activated charcoal in 400 mls of water and mix thoroughly. Administer 5 ml/kg or 350 ml for an average adult. Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk justified by the presence of additional toxic substances. Activated charcoal may induce vomiting, but may be given after emesis or lavage to absorb toxic additives. Steroid therapy in mild to moderate cases does not improve outcome. Bacterial pneumonia often occurs after exposure, but prophylactic antibiotics are not indicated and should be reserved for documented bacterial pneumonia.

Light hydrocarbons have been associated with cardiac sensitization in abuse situations. Hypoxia or the injection of adrenaline-like substances enhanced these effects.

## 5. FIRE FIGHTING MEASURES

### FLAMMABLE PROPERTIES

TCC Flash Point: > 65.6 C (> 150.1 F)  
Autoignition Temperature: N/A

### FLAMMABLE LIMITS IN AIR

LEL: N/A  
UEL: N/A

### EXTINGUISHING MEDIA:

Carbon dioxide, foam, water spray (fog), or dry chemical.

### FIRE & EXPLOSION HAZARDS:

Flammable Liquid and Vapor. Can burn in a fire, releasing toxic vapors, fumes, and smoke, including carbon monoxide and organic vapors. Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup which could result in container rupture or explosion.

Vapors may cause flash fire. Vapors may accumulate in low or confined areas, travel considerable distance to source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

### FIRE FIGHTING INSTRUCTIONS:

As in any fire, wear self-contained breathing apparatus pressure-demand MSHA/NIOSH (approved or equivalent) and full protective gear.

Avoid breathing smoke and vapor.

### COMBUSTION PRODUCTS:

Hazardous decomposition products are oxides of carbon and nitrogen including CO and CO<sub>2</sub>, and some metallic oxides.

## 6. ACCIDENTAL RELEASE MEASURES

### SAFEGUARDS (PERSONNEL):

Immediately contact emergency personnel. Eliminate all sources of ignition. Evacuate non-emergency personnel to a safe area. Use suitable protective equipment (see section 8). Follow all fire fighting procedures in Section 5. Do not touch or walk through spilled material.

If applicable, report spills to the proper environmental agencies as required by federal, state and local regulations.

**INITIAL CONTAINMENT:**

Eliminate all sources of ignition - Heat, sparks, flame, electricity, and impact. If emergency personnel are unavailable contain spilled material with dikes or absorbents. Use a non-sparking or explosion proof means to transfer material to a sealed, appropriate container for disposal. Do not allow material to enter soil, surface water, or sewer system. If possible, try to contain floating material.

**LARGE SPILLS PROCEDURE:**

Stop the source of the leak, if it is safe to do so. Contain spilled material. Transfer material and to a disposal container. Absorb residue with inert material (e.g. dry sand or earth), then place in a chemical waste container. Do not flush to sewer. Keep away from waterways. Use explosion-proof equipment during clean-up.

**MISCELLANEOUS:**

Treat or dispose of in accordance with all federal, state, and local requirements.

## **7. HANDLING AND STORAGE**

**HANDLING (PERSONNEL):**

DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

Keep away from heat, sparks and flame. Do not ingest. Avoid breathing vapor or mist. Keep container closed. Use only with adequate ventilation. Avoid exposure during pregnancy. Wash thoroughly after handling. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment.

**HANDLING (PHYSICAL ASPECTS):**

Secure container after each use. Store in a cool dry, secure area. Keep out of reach of children. Ground containers when transferring material.

Avoid contact with strong oxidizing agents.

Empty drums should be completely drained, properly bunged, and promptly returned to a drum reconditioner, or properly disposed of.

Store in a segregated and approved area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Keep container in a well-ventilated place.

**STORAGE PRECAUTIONS:**

Store in a tightly closed container. Store in a cool dry place. Eliminate all sources of ignition - heat, sparks, flame, electricity, impact and friction. Contact with hot surfaces may ignite the product.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**ENGINEERING CONTROLS:**

Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product.

**EYE / FACE PROTECTION REQUIREMENTS:**

Wear safety glasses with side shields or goggles. Goggles with a face shield may be necessary depending on quantity of material and conditions of use.

**SKIN PROTECTION REQUIREMENTS:**

Wear protective gloves to minimize skin contamination. When prolonged or frequently repeated contact could occur, use protective clothing impervious to this material.

Wash hands thoroughly after handling.

**RESPIRATORY PROTECTION REQUIREMENTS:**

Use appropriate respiratory protection if there is the potential to exceed the exposure limits.

EXPOSURE GUIDELINES:

METHYLCYCLOPENTADIENYL-MANGANESE TRICARBONYL

ACGIH TWA: 0.2 mg/m<sup>3</sup>

NAPHTHALENE

OSHA PEL: 10 ppm, 50 mg/m<sup>3</sup>

OSHA TWA: 10 ppm, 50 mg/m<sup>3</sup>

ACGIH TWA: 10 ppm, 52 mg/m<sup>3</sup>

OSHA STEL: 15 ppm, 75 mg/m<sup>3</sup>

ACGIH STEL: 15 ppm, 79 mg/m<sup>3</sup>

1,2,4-TRIMETHYLBENZENE

ACGIH TWA: 25 ppm

XYLENE

OSHA TWA: 100 ppm

ACGIH TWA: 100 ppm

OSHA STEL: 150 ppm

ACGIH STEL: 150 ppm

ETHYLBENZENE

OSHA TWA: 100 ppm

OSHA STEL: 125 ppm

ACGIH STEL: 125 ppm

**9. PHYSICAL AND CHEMICAL PROPERTIES**

FORM .....: Liquid  
COLOR .....: Amber  
ODOR .....: Aromatic hydrocarbon  
SOLUBILITY IN WATER ...: Insoluble  
SPECIFIC GRAVITY .....: 0.9095 at 60 Deg F (Water = 1)  
BULK DENSITY .....: 7.57 Pounds per Gallon at 60 Deg F  
PH .....: Not applicable

**10. STABILITY AND REACTIVITY**

STABILITY:

MMT is extremely photosensitive and decomposes rapidly when exposed to light. Photolytic action converts the organic compound to a mixture of non-hazardous manganese oxides, carbonates, and organics derived from methylcyclopentadiene. These decomposition products are less toxic than the neat MMT.

POLYMERIZATION:

Hazardous polymerization will not occur.

**INCOMPATIBILITY WITH OTHER MATERIALS:**

Avoid contact with strong oxidizing and reducing agents, such as nitric and sulfuric acids, halogens, hydrogen peroxide and chlorinating agents. May burn or react violently with fluorine/oxygen mixtures with 50-100% fluorine. Decomposes with heat.

**CONDITIONS TO AVOID:**

Avoid exposure to light, high temperatures, sparks, open flames, and temperatures above 50C (122F) - 60C (140F).

**11. TOXICOLOGICAL INFORMATION**

**MISCELLANEOUS:**

Please contact supplier for toxicological information.

**12. ECOLOGICAL INFORMATION**

**MISCELLANEOUS:**

Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment, based on calculation.

MMT is extremely photosensitive and decomposes rapidly when exposed to light. Photolytic action converts the organic compound to a mixture of non-hazardous manganese oxides, carbonates, and organics derived from methylcyclopentadiene. These decomposition products are less toxic than the neat MMT.

**13. DISPOSAL CONSIDERATIONS**

**WASTE DISPOSAL:**

Do not dispose of into waste water treatment facilities. Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.

**14. TRANSPORTATION INFORMATION**

PRODUCT LABEL .....: FPS Premium Home Heat  
D.O.T. SHIPPING NAME .....:  
FlammableLiquid,Toxic,nos,(ContainPetroleumDistil-  
TECHNICAL SHIPPING NAME ...:  
lates,methylcyclopentadienylmanganesetricarbonyl)  
D.O.T. HAZARD CLASS .....: 3 (Flammable Liquid, Toxic)  
UN NUMBER .....: UN1992  
D.O.T. PLACARD .....: Flammable Liquid, Toxic  
PACKAGE CLASS .....: Packing Group III

MISCELLANEOUS:

This material is a marine pollutant when shipped in quantities greater than 119 gallons.

**15. REGULATORY INFORMATION**

REGULATORY DISCLOSURES:

New Jersey Right to Know list:

1,2,4-Trimethylbenzene, CAS #95-63-6, 1.0 - 5.0 %.

Xylene, CAS # 1330-20-7, 1.0 - 5.0 %.

Naphthalene, CAS# 91-20-3, < 10 %.

Pennsylvania Right to Know List:

1,2,4-Trimethylbenzene, CAS #95-63-6, 1.0 - 5.0 %.

Xylene, CAS # 1330-20-7, 1.0 - 5.0 %.

Naphthalene, CAS# 91-20-3, < 10 %.

Ethylbenzene, CAS # 100-41-4, < 0.5 %.

Canadian Disclosure List

METHYLCYCLOPENTADIENYL-MANGANESE TRICARBONYL (12108-13-3)

NAPHTHALENE (91-20-3)

1,2,4-TRIMETHYLBENZENE (95-63-6)

ETHYLBENZENE (100-41-4)

SARA Title III - Section 313

NAPHTHALENE (91-20-3)  
1,2,4-TRIMETHYLBENZENE (95-63-6)  
XYLENE (1330-20-7)

CERCLA Hazardous Substances

NAPHTHALENE (91-20-3) -- RQ 100 lb  
XYLENE (1330-20-7) -- RQ 1000 lb  
ETHYLBENZENE (100-41-4) -- RQ 1000 lb  
VINYL ACETATE MONOMER (108-05-4) -- RQ 5000 lb

RCRA Hazardous Substances

NAPHTHALENE (91-20-3) -- RCRA Code: U165  
XYLENE (1330-20-7) -- RCRA Code: U239

Clean Air Act - Section 112

VINYL ACETATE MONOMER (108-05-4)

Title V

NAPHTHALENE (91-20-3)  
1,2,4-TRIMETHYLBENZENE (95-63-6)  
XYLENE (1330-20-7)  
ETHYLBENZENE (100-41-4)  
VINYL ACETATE MONOMER (108-05-4)

SC Toxic Air Pollutants List

NAPHTHALENE (91-20-3)  
XYLENE (1330-20-7)  
ETHYLBENZENE (100-41-4)  
VINYL ACETATE MONOMER (108-05-4)

MISCELLANEOUS INFORMATION:

This material or all of its components are listed on the Inventory of Existing Chemical Substances under the Toxic Substance Control Act (TSCA).

This material or all of its components are listed on the Canadian Domestic Substances List (DSL).

California Prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Naphthalene, Benzene.

**16. OTHER INFORMATION**

APPROVAL DATE .....: May 7, 2008  
SUPERCEDES DATE ...: New  
RTN NUMBER .....: 00311249 (Official Copy)

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END OF MSDS  
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