Material Safety Data Sheet

1. MATERIAL AND COMPANY IDENTIFICATION

Material Name : **Super S Fuel Injector Treatment**
Uses : Restores carburetor & fuel injector

Manufacturer/Supplier : **Smitty's Supply, Inc.**
PO Box 530
Roseland, LA 70456
USA
MSDS Request : 985-748-9687

Emergency Telephone Number
CHEMTREC : 800-424-9300 - toll free in the U.S., Canada, and U.S. Virgin Islands.
703-527-3887 - for calls originating elsewhere.
(Collect calls accepted)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Identity	CAS No.	Concentration
Kerosine	8008-20-6	95.00 - 99.00 %
Methylcyclopentadienyl manganese tricarbonyl	12108-13-3	1.00 - 5.00 %

3. HAZARDS IDENTIFICATION

Emergency Overview

Appearance and Odour : Clear amber. Liquid. Hydrocarbon.

Health Hazards : Harmful: may cause lung damage if swallowed. Vapours may cause drowsiness and dizziness.
Safety Hazards : Flammable.
Environmental Hazards : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Health Hazards
Inhalation : Vapours may cause drowsiness and dizziness.
Skin Contact : May cause moderate irritation to skin. Repeated exposure may cause skin dryness or cracking.
Eye Contact : May cause slight irritation to eyes.
Ingestion : Harmful: may cause lung damage if swallowed.
Signs and Symptoms : If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever. The onset of respiratory symptoms may be delayed for several hours after exposure. Defatting dermatitis signs and symptoms may include a burning sensation and/or a dried/cracked appearance. Breathing of high vapour concentrations may cause central nervous system (CNS) depression resulting in dizziness, light-headedness, headache, nausea and loss of coordination.

Continued inhalation may result in unconsciousness and death.

Aggravated Medical Condition	:	Pre-existing medical conditions of the following organ(s) or organ system(s) may be aggravated by exposure to this material: Skin. Respiratory system.
Environmental Hazards	:	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Additional Information	:	Under normal conditions of use or in a foreseeable emergency, this product meets the definition of a hazardous chemical when evaluated according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

4. FIRST AID MEASURES

Inhalation	:	Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.
Skin Contact	:	Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.
Eye Contact	:	Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.
Ingestion	:	If swallowed, do not induce vomiting: transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (37° C), shortness of breath, chest congestion or continued coughing or wheezing.
Advice to Physician	:	Treat symptomatically. Potential for chemical pneumonitis. Consider: gastric lavage with protected airway, administration of activated charcoal. Call a doctor or poison control center for guidance.

5. FIRE FIGHTING MEASURES

Clear fire area of all non-emergency personnel.

Flash point	:	51.7 °C / 125.1 °F (CC / ASTM D3278)
Upper / lower Flammability or Explosion limits	:	Typical 0.60 - 6 %(V)
Auto ignition temperature	:	> 200 °C / 392 °F
Specific Hazards	:	Will float and can be reignited on surface water. Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds.
Suitable Extinguishing Media	:	Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Unsuitable Extinguishing Media	:	Do not use water in a jet.
Protective Equipment for Firefighters	:	Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

Additional Advice	:	Keep adjacent containers cool by spraying with water.

6. ACCIDENTAL RELEASE MEASURES

Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. See Chapter 13 for information on disposal. Observe all relevant local and international regulations.

Protective measures	:	Avoid contact with skin and eyes. Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area. Use appropriate containment (of product and fire fighting water) to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment.
Clean Up Methods	:	Slippery when spilt. Avoid accidents, clean up immediately. Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an absorbent. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.
Additional Advice	:	Local authorities should be advised if significant spillages cannot be contained.

7. HANDLING AND STORAGE

General Precautions	:	Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.
Handling	:	Extinguish any naked flames. Do not smoke. Remove ignition sources. Avoid sparks. Avoid prolonged or repeated contact with skin. Avoid inhaling vapour and/or mists. Use only in well-ventilated areas. When handling product in drums, safety footwear should be worn and proper handling equipment should be used.
Storage	:	Must be stored in a diked (bunded) well-ventilated area, away from sunlight, ignition sources and other sources of heat. Use properly labelled and closeable containers. Keep container tightly closed. Storage Temperature: 0 - 50 °C / 32 - 122 °F
Product Transfer	:	Electrostatic charges may be generated during handling. Electrostatic discharge may cause fire. Earth all equipment.
Recommended Materials	:	For containers or container linings, use mild steel or high density polyethylene.
Unsuitable Materials	:	PVC.

Additional Information : Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Material	Source	Type	ppm	mg/m3	Notation
Kerosine	ACGIH	TWA(Non-aerosol.)		200 mg/m3	as total hydrocarbon vapor
Kerosine	ACGIH	SKIN_DES(Non-aerosol.)			Can be absorbed through the skin.as total hydrocarbon vapor
Methylcyclopentadienyl manganese tricarbonyl	ACGIH	TWA		0.2 mg/m3	as Mn
Methylcyclopentadienyl manganese tricarbonyl	ACGIH	SKIN_DES			Can be absorbed through the skin.as Mn
Methylcyclopentadienyl manganese tricarbonyl	OSHA Z1A	TWA		0.2 mg/m3	as Mn
Methylcyclopentadienyl manganese tricarbonyl	OSHA Z1A	SKIN_FINAL			Can be absorbed through the skin.as Mn
Methylcyclopentadienyl manganese tricarbonyl	OSHA Z1	Ceiling		5 mg/m3	as Mn

Exposure Controls : The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Use sealed systems as far as possible. Adequate explosion-proof ventilation to control airborne concentrations below the exposure guidelines/limits.

Personal Protective Equipment : Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Respiratory Protection : No respiratory protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where

		air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapours [boiling point >65°C(149 °F)].
Hand Protection	:	Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.
Eye Protection	:	Wear safety glasses or full face shield if splashes are likely to occur.
Protective Clothing	:	Skin protection not ordinarily required beyond standard issue work clothes. It is good practice to wear chemical resistant gloves.
Monitoring Methods	:	Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.
Environmental Exposure Controls	:	Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Clear amber. Liquid.
Odour :		Hydrocarbon.
pH :		Not applicable.
Initial Boiling Point and Boiling Range	:	> 150 °C / 302 °F estimated value(s)
Flash point	:	51.7 °C / 125.1 °F (CC / ASTM D3278)
Upper / lower Flammability or Explosion limits	:	Typical 0.60 - 6 %(V)
Auto-ignition temperature	:	> 200 °C / 392 °F
Vapour pressure	:	< 300 Pa at 20 °C / 68 °F (estimated value(s))
Density :		0.84 g/cm3
Water solubility	:	Negligible.
n-octanol/water partition coefficient (log Pow)	:	> 3
Kinematic viscosity	:	Data not available
Vapour density (air=1)	:	> 5 (estimated value(s))
Evaporation rate (nBuAc=1)	:	Data not available

10. STABILITY AND REACTIVITY

Stability	:	Stable.
Conditions to Avoid	:	Avoid heat, sparks, open flames and other ignition sources.
Materials to Avoid	:	Strong oxidizing agents.
Hazardous Decomposition Products	:	Hazardous decomposition products are not expected to form during normal storage.
Hazardous Polymerisation	:	Data not available
Sensitivity to Mechanical Impact	:	Data not available

11. TOXICOLOGICAL INFORMATION

Basis for Assessment	:	Information given is based on data on the components and the toxicology of similar products.
Acute Oral Toxicity	:	Expected to be of low toxicity: LD50 > 5000 mg/kg , Rat Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.
Acute Dermal Toxicity	:	Expected to be of low toxicity: LD50 > 5000 mg/kg , Rabbit
Acute Inhalation Toxicity	:	Expected to be of low toxicity: LC50 >20 mg/l / 4 h, Rat High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death.
Skin Irritation	:	Moderately irritating to skin (but insufficient to classify). Repeated exposure may cause skin dryness or cracking.
Eye Irritation	:	Expected to be slightly irritating.
Respiratory Irritation	:	Breathing of high vapour concentrations may cause central nervous system (CNS) depression resulting in dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and death.
Sensitisation	:	Not expected to be a skin sensitiser.
Repeated Dose Toxicity	:	Not expected to be a hazard.
Mutagenicity	:	Not considered a mutagenic hazard.
Carcinogenicity	:	Not classified as a carcinogen.

Material	:	**Carcinogenicity Classification**
Kerosine	:	ACGIH Group A3: Confirmed animal carcinogen with unknown relevance to humans.
Kerosine	:	IARC 2A: Probable carcinogen.

Reproductive and Developmental Toxicity	:	Not expected to be a hazard.

12. ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products.

Acute Toxicity	:	Poorly soluble mixture. Expected to be toxic: LL/EL/IL50 1-10 mg/l (to aquatic organisms) (LL/EL50 expressed as the

nominal amount of product required to prepare aqueous test extract).

Mobility	:	Liquid under most environmental conditions. Floats on water. Contains volatile components. Partly evaporates from water or soil surfaces, but a significant proportion will remain after one day. If it enters soil, it will adsorb to soil particles and will not be mobile.
Persistence/degradability	:	Expected to be not readily biodegradable. Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment. The volatile components oxidise rapidly by photochemical reactions in air.
Bioaccumulation	:	Contains components with the potential to bioaccumulate.
Other Adverse Effects	:	Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

13. DISPOSAL CONSIDERATIONS

Material Disposal	:	Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water courses.
Container Disposal	:	Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Do not, puncture, cut, or weld uncleaned drums. Dispose in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand.
Local Legislation	:	Disposal should be in accordance with applicable regional, national, and local laws and regulations.

14. TRANSPORT INFORMATION

US Department of Transportation Classification (49CFR)

Identification number	UN 1223
Proper shipping name	Kerosene
Class / Division	3
Packing group	III
Emergency Response Guide No .	128
Additional Information	Oil: This product is an oil under 49CFR (DOT) Part 130. If shipped by rail or highway in a tank with a capacity of 3500 gallons or more, it is subject to these requirements. Mixtures or solutions containing 10% or more of this product may also be subject to this rule.

IMDG

Identification number	UN 1223
Proper shipping name	KEROSENE
Class / Division	3
Packing group	III
Marine pollutant:	No

IATA (Country variations may apply)

Identification number	UN 1223
Proper shipping name	Kerosene
Class / Division	3
Packing group	III

15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Federal Regulatory Status

Notification Status

EINECS	All components listed.
TSCA	All components listed.
DSL	All components listed.

Comprehensive Environmental Release, Compensation & Liability Act (CERCLA)

Methylcyclopentadienyl manganese tricarbonyl (12108-13-3)

SARA Toxic Release Inventory (TRI) (313)

Methylcyclopentadienyl manganese tricarbonyl (12108-13-3)	3.60%

SARA Extremely Hazardous Substances (302/304)

Super S Fuel Injector Treatment	Reportable quantity: 2778 lbs
Methylcyclopentadienyl manganese tricarbonyl (12108-13-3)	Reportable quantity: 100 lbs
Methylcyclopentadienyl manganese tricarbonyl (12108-13-3)	Threshold Planning Quantity: 100 lbs

State Regulatory Status

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)

This material does not contain any chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

New Jersey Right-To-Know Chemical List

Kerosine (8008-20-6)	Listed.
Methylcyclopentadienyl manganese tricarbonyl (12108-13-3)	Listed.

Pennsylvannia Right-To-Know Chemical List

Kerosine (8008-20-6)	Listed.
Methylcyclopentadienyl manganese tricarbonyl (12108-13-3)	Environmental hazard. Listed.

16. OTHER INFORMATION

MSDS Version Number	:	2.0
MSDS Effective Date	:	06/19/2009
MSDS Revisions	:	A vertical bar (|) in the left margin indicates an amendment from the previous version.
MSDS Regulation	:	The content and format of this MSDS is in accordance with the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
MSDS Distribution	:	The information in this document should be made available to all who may handle the product.
Disclaimer	:	The information contained herein is based on our current knowledge of the underlying data and is intended to describe the product for the purpose of health, safety and environmental requirements only. No warranty or guarantee is expressed or implied regarding the accuracy of these data or the results to be obtained from the use of the product.