Exmark Material Safety Data Sheet

Exmark Mfg. Co., Inc.
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Emergency: **800-424-9300**
Information: **402-223-6300**
Fax: **402-223-6384**

SECTION 1 CHEMICAL PRODUCT IDENTIFICATION

Product: **Exmark Premium Fuel Treatment**
Synonyms/Other: Fuel Treatment
MSDS Number: 10814
Product Type: Fuel additive
Revision Date: 12/5/2012

SECTION 2 COMPOSITION INFORMATION

INGREDIENTS	CAS #	%	OSHA TWA	OSHA STEL	ACGIH TWA	SKIN
Light hydrotreated distillate	64742-47-8	--	100 ppm	100 ppm	100 ppm	NO
Light aromatic solvent naphtha	64742-95-6	--	--	--	--	NO
Trimethylbenzene, 1,2,3-	526-73-8	<5	25 ppm	--	--	NO
Xylene	1330-20-7	<5	100 ppm	100 ppm	--	NO

Comments: * - applicable to oil mist, not defined for base oils.
TWA – Time Weighted Average is the employee's average airborne exposure in any 8-hour work shift of a 40-hour work week which shall not be exceeded.
STEL – Short Term Exposure Limit is the employee's 15-minute time weighted average exposure which shall not be exceeded at any time during a work day unless another time limit is specified.

SECTION 3 HAZARDOUS IDENTIFICATION

WARNING:

- MAY BE HARMFUL IF INHALED.
- FLAMMABLE.
- MAY CAUSE EYE IRRITATION.
- HARMFUL IF SWALLOWED.

Eye contact: Direct contact may cause irritation, redness, tearing and blurred vision.

Skin contact: Avoid prolonged skin contact. This product contains materials that may cause skin irritation. Prolonged or repeated contact may result in dermatitis (dryness, chapping and reddening of skin).

Inhalation: Overexposure by inhalation of material may cause nonspecific discomfort, such as nausea, headache, or weakness. Caution should be taken to prevent aerosolization or misting of this product without proper respiratory protection.

Ingestion: Do not ingest. Primary danger is due to lung aspiration. Due to the very light viscosity aspiration may be expected.. Should aspiration occur, may lead to chemical pneumonitis which is characterized by pulmonary edema and hemorrhage and may be fatal. Signs of lung involvement include increased respiratory rate, increased heart rate, and a bluish discoloration of the skin. Coughing, choking and gagging are often noted at the time of aspiration. This product has laxative properties and may result in abdominal cramps and diarrhea.

Other: Not applicable.

SECTION 4 FIRST AID MEASURES

Eye contact: Check for and remove contact lenses. Flush eyes with cool, clean, low-pressure water for at least 15 minutes. Hold eyelids apart to ensure complete irrigation of the eye and eyelid tissue. If irritation persists seek medical attention.

Skin contact: Remove contaminated clothing. Wash contaminated area thoroughly with soap and water. If redness or irritation occurs, seek medical attention. Wash contaminated clothing before reuse.

Inhalation: If overcome by inhalation of vapors, remove to fresh air. Use oxygen if there is

	difficulty breathing or artificial respiration if breathing has stopped. Do not leave victim unattended. Seek immediate medical attention if necessary.
Ingestion:	Do not induce vomiting unless directed by a physician. Give 2 glasses of water or milk. During vomiting there is a danger of aspirating liquid into lungs, causing serious damage and chemical pneumonitis. If spontaneous vomiting occurs keep head below hips to prevent aspiration and monitor for breathing difficulty. Gastric lavage should be performed only by qualified medical personnel. Keep affected person warm and at rest. Seek immediate medical attention.
Other:	Not applicable.

SECTION 5 FIRE FIGHTING MEASURES

Flash point:	75℃ (167℉) by ASTM D 92 (COC).
Flammable limits:	Not determined.
Extinguishing media:	Use water spray, dry chemical, alcohol foam, all purpose AFFF or carbon dioxide to extinguish fire.
Special firefighting procedures:	Evacuate area and fight fire from a safe distance. If leak or spill has not ignited, ventilate area and use water spray to disperse gas or vapor and to protect personnel attempting to stop a leak. Use water spray to cool adjacent structures and to protect personnel. Shut off source of flow if possible (safely). Stay away from storage tank ends. Withdraw immediately in case of rising sound from venting safety device or any discoloration of storage tank due to fire. Fire fighters must wear MSHA/NIOSH approved positive pressure breathing apparatus (SCBA) with full face mask and full protective equipment.
Unusual fire & explosion hazards:	Dense smoke may be generated while burning. Toxic fumes, gases or vapors may evolve on burning. High temperatures may create heavy flammable vapors that may settle along ground level and low spots to create an invisible fire hazard.
Byproducts of combustion:	Fires involving this product may release oxides of carbon, nitrogen and sulfur; reactive hydrocarbons and irritating vapors.
Autoignition temperature:	Not determined.
Explosion data:	Not determined. Care should always be exercised in dust/mist areas.
Other:	Not applicable.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Spill control procedures (land):	Immediately turn off or isolate any source of ignition (pilot lights, electrical equipment, flames, heaters, etc.). Evacuate area and ventilate. Personnel wearing proper protective equipment should contain spill immediately with inert materials (sand, earth, chemical spill pads of cotton) by forming dikes. Dikes should be placed to contain spill in a manner that will prevent material from entering sewers and waterways. Large spill, once contained, may be picked up using explosion proof, non-sparking vacuum pumps, shovels, or buckets, and disposed of in suitable containers for disposal. If a large spill occurs notify appropriate authorities. In case of road spill or accident contact Chem-Trec (800-424-9300).
Spill control procedures (water):	Try to contain large spills with floating booms to prevent spill from spreading. Remove from surface by skimming or with suitable adsorbents. If a large spill occurs notify appropriate authorities (normally the National Response Center or Coast Guard at 800-424-8802).
Waste disposal	

method:	Most oil based products are incinerated, land-filled or reclaimed. All disposals must comply with federal, state, and local regulations. The material, if spilled or discarded may be a regulated waste. Refer to state and local regulations. Department of Transportation (DOT) regulations may apply for transporting this material when spilled. See Section 14.
Other:	CAUTION - If spilled material is cleaned up using a regulated solvent, the resulting waste mixture will be regulated.

SECTION 7 HANDLING AND STORAGE

Handling procedures:	Keep containers closed when not in use. Do not transfer to unmarked containers. Fire extinguishers should be kept readily available. See NFPA 30 and OSHA 1910.106 -- Flammable and Combustible Liquids. Empty containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld, or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.
Storage procedures:	Store containers away from heat, sparks, open flame, or oxidizing materials.
Additional information:	No additional information.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protection:	Applicable mainly to persons in repeated contact situations such as packaging of product, service/maintenance, and cleanup/spill control personnel.
Respiratory protection:	None required if airborne concentrations are maintained below threshold limits listed on page one. Otherwise a respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed. Where misting may occur, wear an MSHA/NIOSH approved (or equivalent) half-mask form dust/mist air purifying respirator.
Eye protection:	Eye protection is strongly recommended. If material is handled such that it could be splashed into the eyes, wear safety glasses with side shields or vented/splash proof goggles (ANSI Z87.1 or approved equivalent).
Hand protection:	Impervious gloves such as neoprene or nitrile rubber to avoid skin sensitization and absorption.
Other protection:	Use of an apron and overboots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization and absorption. If handling hot material use insulated protective equipment. Launder soiled clothes. Properly dispose of contaminated leather articles and other materials which cannot be decontaminated.
Local control measures:	Use adequate ventilation when working with material in an enclosed area. Mechanical methods such as fume hoods or area fans may be used to reduce localized vapor/mist areas. If vapor or mist is generated when the material handled, adequate ventilation in accordance with good engineering practice must be provided to maintain concentrations below the specifed exposure. Eyewash stations and showers should be available in areas where this material is used and stored.
Other:	Consumption of food and drink should be avoided in work areas where product is present. Always wash hands and face with soap and water before eating, drinking or smoking.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Vapor pressure:	Not determined.
API gravity:	31.7° at 15.6℃ (60.0℉).
Density:	7.22 lbs/gal at 15.6℃ (60.0℉).
Specific gravity:	0.8670 at 15.6℃ (60.0℉).
Solubility:	Negligible in water, soluble in most hydrocarbon solvents.
Vapor density (air=1):	>1.
Evaporation rate (n-Butyl Acetate=1):	Not determined.
Odor:	Mild, oily odor.
Appearance:	Green, thin fluid.

Viscosity:	2.32 cSt at 100℃ (212℉). 7.52 cSt at 40℃ (104℉).
Boiling point:	Not determined.
Pour/Freeze point:	Not determined.
Other:	Not applicable.

SECTION 10 STABILITY AND REACTIVITY

Stability:	Material is stable at room temperatures and pressure.
Conditions to avoid:	Avoid high temperatures and product contamination.
Incompatibility with other materials:	Avoid contact with acids and oxidizing materials.
Decomposition products:	Smoke, carbon monoxide and dioxide, and other aldehydes of incomplete combustion. Oxides of carbon, nitrogen and sulfur, and phosphorus; reactive hydrocarbons and irritating vapors.
Hazardous polymerization:	Will not occur.
Other:	Not applicable.

SECTION 11 TOXICOLOGICAL INFORMATION

Oral toxicity:	Not determined.
Dermal toxicity:	Not determined.
Inhalation toxicity:	On rare occasions, prolonged and repeated exposure to oil mist poses a risk of pulmonary disease such as chronic lung inflammation. This condition is usually asymptotic as a result of repeated small aspirations. Shortness of breath and cough are the most common symptoms. Based on data from similar materials.
Dermal sensitization:	Prolonged or repeated contact may make skin more sensitive to other skin sensitizers. Based on data from similar materials.
Chronic toxicity:	Not determined.
Carcinogenicity:	The known components of this material are not listed by IARC, NTP, OSHA or ACGIH as known carcinogens.
Mutagenicity:	Not determined.
Reproductive toxicity:	Not determined.
Other:	The finished material has not been evaluated for toxicology. Data supplied is based upon component evaluations. This product contains xylene, a chemical that has been reported to cause developmental toxicity in rats and mice exposed by inhalation during pregnancy. The effects noted consisted of delayed development and minor skeletal variations; additionally, when pregnant mice were exposed by ingestion to a level that killed nearly one-third of the test group, lethality (resorptions) and malformations (primarily cleft palate) occurred. Malformations have not been reported following inhalation exposure. Because of the very high levels of exposure used in these studies, we do not believe that their results imply an increased risk of reproductive toxicity to workers exposed to xylene levels at or below the exposure standard. Xylene has given negative results in several mutagen testing assays including the Ames assay. In a cancer study sponsored by the National Toxicology Program (NTP), technical grade xylene gave no evidence of carcinogenicity in rats or mice dosed daily for two years. Mixed xylenes have been shown to cause probable hearing loss in rats exposed to 800 ppm in the air for 14 hours per day for six weeks. Although no information is available for lower concentrations, other chemicals that cause hearing loss in rats at relatively high concentrations do not cause hearing loww at low concentrations. Men exposed to 135 to 400 ppm of m-xylene for over 3 hours per day for a total of 4 days showed no hearing loss. Worker exposure to xylenes at the permissible exposure limit (100 ppm, time-weighted average) is not expected to cause hearing loss.

This material contains (1,2,3)trimethyl-benzene. Two subchronic inhalation studies, in which rats of each sex were exposed for six hours/day, five days/week for thirteen weeks to 0, 50, 100, 500 or 1200 ppm cumene vapor, found that rats exposed to 500 and 1200 ppm had increases in weights of liver, kidneys and adrenals, and microscopic changes in the kidneys. Decreased motor activity in male rats exposed to 500 and 1200 ppm observed in the first study was not duplicated in the second study. Cataracts in the lenses of the eyes which in both treated and untreated rats in the first study were not staticstically higher in treated animals in the second study, indicating that cumene did not cause cataracts. There were no exposure-related changes in hearing (auditory brainstem response), spermatogenesis or responses in the functional observation battery.

In inhalation developmental toxicity studies, there was no evidence of developmental effects either in rabbits exposed to levels up to 2300 ppm on days 6-18 of gestation or in rats exposed to levels up to 1200 ppm on days 6-15 of gestation.

SECTION 12 ECOLOGICAL INFORMATION

Environmental toxicity: Not determined. However, this material may be toxic to aquatic organisms and should be kept out of sewage and drainage systems and all bodies of water.

Environmental fate: Not determined.

Other: Not applicable.

SECTION 13 DISPOSAL CONSIDERATIONS

Waste disposal: Product contains up to 1% (1,2,3)trimethyl-benzene, which is categorized by U055 (toxic) by RCRA. Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. This product unadulterated by other materials may be classified as a non-regulated waste in some areas - but still needs to be disposed of at approved facilities. Waste management should be in full compliance with federal, state, and local laws.

Disposal consideration: Most used and non-use oils are incinerated by licensed burner facilities for heat value, or reclaimed by oil recycling services. Look in a local telephone directory or internet for headings under, 'Waste', 'Waste Services', 'Waste Disposal' for companies licensed to handle such material. Additional information can be obtained from local EPA, DNR, Sewer and Land-Fill sites. Unused, packaged fluids may be donated to other companies or charities (fluids MUST be unused).

Other: The transportation, storage, treatment and disposal of RCRA waste material must be conducted in compliance with 40 CFR 262, 263, 264, 268 and 270. Disposal can only occur in properly permitted facilities. Check state and local regulations for any additional requirements as these may be more restrictive than federal laws and regulations. Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Disposal of this material must be conducted in compliance with all federal, state, and local regulations.

SECTION 14 TRANSPORT INFORMATION

DOT Shipping Description:	UN1268, PETROLEUM DISTILLATES, N.O.S., COMBUSTIBLE LIQUID, III NOTE: NON-BULK PACKAGES ARE NOT REGULATED IN THE U.S.A. SEE 49 CFR 173.150 (f) FOR SPECIAL PROVISIONS FOR VESSEL AND AIRCRAFT.
IMO/IMDG Shipping Description:	UN1268, PETROLEUM DISTILLATES, N.O.S. (STODDARD SOLVENT), 3, III, FLASH POINT SEE SECTION 5 OR 9, MARINE POLLUTANT (STODDARD SOLVENT)
ICAO/IATA Shipping Description:	UN1268, PETROLEUM DISTILLATES, N.O.S., 3, III

SECTION 15 REGULATORY INFORMATION

Clean water act/oil pollution act:

Under Section 311 of the Clean Water Act (40 CFR 110) and the Oil Pollution Control Act of 1990, this material is considered an oil. Any spill or discharges that produce a visible sheen or film on surface of water, or in waterways, ditches, or sewers leading to surface water must be reported. Contact the National Response Center at 800-424-8802.

Material contains (1-methylethyl)-benzene, a listed DOT Marine Pollutant.

TSCA: All components of this material are listed in the U.S. TSCA Inventory.

Other TSCA: Not applicable.

SARA Title III:

Section 302/304 extremely hazardous substances:
None.

Section 311, 312 hazard categorization:

Acute (immediate health effects):	YES
Chronic (delayed health effects):	NO
Fire (hazard):	YES
Reactivity (hazard):	NO
Pressure (sudden release hazard):	NO

Section 313 toxic chemicals:
Xylene
1,2,3-trimethylbenzene.

CERCLA:

For stationary/moving sources – reportable quantity (due to):
80,000 pounds due to xylene (<2.5%).

Other:

Xylene is additionally listed by the following chemical lists: Massachusetts' RTK, IARC Group 2B, Pennsylvania RTK, New Jersey RTK, CERCLA 302.4, Minnesota RTK.
Light aromatic solvent naphtha is additionally listed by the following chemical lists: TSCA Section 8(d).
1,2,3-trimethylbenzene is additionally listed by the following chemical lists: Massachusetts' RTK, IARC Group 2B, Pennsylvania RTK, New Jersey RTK, Minnesota RTK, TSCA Section 12(b), TSCA Section 4(a), Canadian WHMIS.

WHMIS Classification:
Class B, Division 3: Combustible Liquids
Class D, Division 2, Subdivision B: Toxic Material
- Skin or Eye Irritation
- Skin Sensitization

A release of this product, as supplied, is exempt from reporting under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) by the petroleum exclusion. However, releases may be reportable to the Nation Response Center under the Clean Water Act, 33 U.S.C. 1321(b)(3) and (5) - see head of Section 15. Failure to report may result in substantial civil and criminal penalties.

Recommend contacting the local authorities in the event of any type of spill to determine local reporting requirements and also to aid in the cleanup.

Exmark Material Safety Data Sheet

SECTION 16 OTHER INFORMATION

	NFPA 704	NPCA-HMIS	KEY
HEALTH:	1	1	0 = Minimal
FIRE:	2	2	1 = Slight
REACTIVITY:	0	0	2 = Moderate
SPECIFIC HAZARD:	NONE	N/A	3 = Serious
PROTECTION INDEX:	N/A	B	4 = Severe

Precautionary labels:
- MAY CAUSE EYE IRRITATION.
- MAY CAUSE SKIN IRRITATION.
- COMBUSTIBLE.

This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used. Exmark must rely upon information provided by those materials manufacturers or distributors.

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Revisions / Comments: