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MATERIAL SAFETY DATA SHEET

EMERGENCY OVERVIEW

This clear liquid is a combustible and toxic product with a pungent odor. Keep product away from ignition sources in an emergency response. Containers should be grounded during product transfer.

NFPA RATING: HEALTH: 1 FLAMMABILITY: 2 REACTIVITY: 0

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

GENERIC NAME: Diesel Fuel conditioner

ISSUE DATE: February 21, 2006

THIS LUBRICANTS USA PRODUCT IS:

Flow-Max Diesel Treatment

CAS NUMBER:

Mixture

SYNONYMS / GENERAL NAMES:

Fuel conditioner

24 HOUR EMERGENCY TELEPHONE:

(CHEMTREC) 1-800-424-9300

TECHNICAL INFORMATION:

1-800-442-5823

2. COMPOSITION / INFORMATION ON INGREDIENTS / HAZARDOUS INGREDIENTS

| COMPONENTS | CAS NO. | % | HAZARD DATA |
|---------------------|-------------|-------|-------------|
| Hydrocarbon mixture | Proprietary | 50-80 | |
| Octylnitrate | 27247-96-7 | <30 | |
| 2 Butoxyethanol | 111-76-2 | <10 | |

HAZARDOUS INGREDIENTS: NONE

HAZARDOUS PER 29 CFR 1916.1200: NO

3. HAZARDOUS IDENTIFICATION

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| ROUTES OF ENTRY: | Skin contact, eye contact, inhalation and ingestion. |
| TARGET ORGANS: | Nervous system, digestive system, skin, eyes, lungs |
| IRRITANCY: | This product can cause mild, transient, eye irritation with short-term contact with liquids or sprays. |
| REPRODUCTIVE EFFECTS: | N/A |
| CANCER INFORMATION: | This product does not contain any components at concentrations above 0.1% that are considered carcinogenic by OSHA, IARC, or NTP. |

4. FIRST AID MEASURES

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| EYES: | Check for and remove contact lenses. Flush eyes with cool, clean, low-pressure water while occasionally lifting and lowering eyelids. Seek medical attention if excessive tearing, redness or pain persists. |
| DERMAL: | Remove contaminated shoes and clothing, wipe off excess material. Wash exposed skin with soap and water. Seek medical attention if tissue appears damaged or if irritation persists. Thoroughly clean contaminated clothing before reuse. Discard contaminated leather goods. |
| INGESTION: | Poisonous liquid. Do not induce vomiting unless directed to by a physician. Do not give anything to drink unless directed to by a physician. Never give anything by mouth to a |

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| | person who is not fully conscious. Seek medical attention immediately. |
| INHALATION: | Move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If breathing is difficult, a qualified individual should administer 100 percent humidified oxygen. Seek medical attention immediately. Keep the affected individual warm and at rest. |
| INJECTION: | Injection of pressurized hydrocarbons can cause severe, permanent tissue damage. Initial symptoms may be minor. Injection of petroleum hydrocarbons requires immediate medical attention. |

5. FIRE FIGHTING MEASURES

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| FLASH POINT, °C(°F): | 62.8°C (145°F) |
| FLAMMABLE LIMITS (% BY VOLUME): | LOWER: 1.1% UPPER: 12.7% |
| EXTINGUISHING MEDIA: | Use dry chemical, foam, carbon dioxide or water fog. |
| SPECIAL FIRE FIGHTING PROCEDURES: | N/A |
| AUTOIGNITION TEMPERATURE: | 238 C (460 F) |
| EXPLOSION DATA: | N/A |
| NFPA RATING: | HEALTH: <u> 1 </u> FLAMMABILITY: <u> 2 </u> REACTIVITY <u> 0 </u> |

6. ACCIDENTAL RELEASE MEASURES

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| SPILL PROCEDURES: | Shut off and eliminate all ignition sources. Keep people away. Recover free product. Add sand, earth or other suitable absorbent to spill area. Minimize skin contact. Ventilate confined spaces. Open all windows and doors. Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses, or extensive land areas. Seek cleanup advice from specialists to minimize physical habitat damage. This material will dissolve in water. Comply with all laws and regulations. Continue to observe precautions for volatile, combustible vapors from absorbed material. |
| Ecotoxicity | Ecological effects testing has not been conducted on this material. Discharges are expected to cause only localized environmental damage. This material is soluble in water. |
| Environmental fate | An environmental fate analysis has not been conducted on this specific product. However, plants and animals may experience harmful or fatal effects when coated with petroleum-based products. The products of degradation are less toxic than the product itself. |

7. HANDLING AND STORAGE

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| HANDLING & STORAGE PROCEDURES: | Keep product away from ignition sources, such as heat, sparks, pilot lights, static electricity and open flames. |
| | Keep container closed. Do not store with strong oxidizing agents. Do not store at temperatures above 120°F or in direct sunlight for extended periods of time. |
| | <u>Empty containers may contain product residues that can ignite with explosive force. Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to flames, sparks, heat or other potential ignition sources; the drum could explode and cause injury or death.</u> |
| | Do not attempt to refill or clean containers since residue is difficult to remove. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All other containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. |
| | For work on tanks refer to Occupational Safety and Health Administration (OSHA) regulations, ANSI Z49.1, and other governmental and industrial references pertaining to cleaning, repairing, welding, or other contemplated operations. |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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| ENGINEERING CONTROLS: | <p>To prevent fire or explosion risk from static accumulation and discharge, effectively bond and/or ground product transfer system in accordance with the National Fire Protection Association (NFPA) publications.</p> <p>Keep containers closed when not in use. Do not store near heat, sparks, flame or strong oxidants. To prevent fire or explosion risk from static accumulation and discharge, effectively bond and/or ground product transfer system in accordance with the NFPA standard for petroleum products.</p> <p>In order to prevent fire or explosion hazards, use appropriate equipment.</p> <p>Information on electrical equipment appropriate for use with this product may be found in the latest edition of the National electrical Code (NFPA-70). This document is available from the NFPA, Batterymarch Park, Quincy, Massachusetts 02269.</p> |
| GLOVES PROTECTION: | Use gloves constructed of chemical resistant materials if needed, to avoid prolonged or repeated skin contact. |
| EYE PROTECTION: | Use splash goggles or face shield when eye contact may occur. |
| RESPIRATORY PROTECTION: | Use supplied-air respiratory protection in confined or enclosed spaces, if needed. |
| CLOTHING RECOMMENDATION: | If splashing or spraying is expected chemical-resistant (Tyvek®, nitrile or neoprene) clothing should be worn. This might include long-sleeves, apron, slicker suit, boots and additional facial protection. If general contact occurs, promptly remove soaked clothing and take a shower. |
| OTHER COMMENTS: | Use good personal hygiene practices. Minimize breathing vapor or mist. Avoid prolonged or repeated contact with skin. Remove contaminated clothing; launder or dry-clean before re-use. Cleanse skin thoroughly after contact, before breaks and meals, and at end of work period. Product is readily removed from skin by waterless hand cleaners followed by washing thoroughly with soap and water. |
| Occupational exposure guidelines | <p>Octylnitrate TWA 1.0 ppm from supplier.</p> <p>2 Butoxyethanol TWA 121 mg/m³ 25 ppm ACGIH TLV skin TWA 240 mg/m³ 50 ppm OSHA</p> |

9. PHYSICAL AND CHEMICAL PROPERTIES

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| APPEARANCE: | Light amber to brown liquid |
| ODOR: | Pungent |
| pH: | NA |
| VAPOR PRESSURE, mm Hg (25°C): | 1 mm Hg @ 20 C (68 F) by ASTM D 2879 |
| VAPOR DENSITY: | <2 (Air =1) |
| MELTING POINT: | < -18 C (0 F) is pour point by ASTM D 97 Not available |
| BOILING RANGE, 760 mm Hg, °C: | 162.8 C |
| SOLUBILITY IN WATER: | Soluble in cold or hot water. |
| SPECIFIC GRAVITY: | 0.91 (Water = 1) |
| EVAPORATION RATE: | 0.1 (butoxyethanol) compared to butyl acetate |
| VISCOSITY 40°C (100°C) | NA |
| MOLECULAR WEIGHT: | NA |
| PERCENT VOLATILE: | NA |

10. STABILITY AND REACTIVITY

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| STABILITY: | Stable. May decompose above 100 C (212 F) |
| INCOMPATIBILITY: | Strong oxidizers would present a serious explosion hazard |
| POLYMERIZATION: | Not expected to occur |
| THERMAL DECOMPOSITION: | CO ₂ , CO, smoke, fumes, unburned hydrocarbons. |

11. TOXICOLOGICAL INFORMATION

Product Codes 13201, 13203

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| EYE IRRITATION: | This product can cause mild, transient, eye irritation with short-term contact with liquid or sprays. |
| DERMAL IRRITATION: | Acute dermal toxicity LD 50 220 mg/kg rabbit (2 butoxyethanol). Avoid skin contact. |
| INHALATION TOXICITY: | Product has acute oral and dermal toxicity. Avoid inhalation. |
| INGESTION IRRITATION: | Product has acute oral toxicity. LD50 is 300 mg/kg (rabbit) butoxyethanol. |
| CHRONIC EXPOSURE SYMPTOMS | Causes damage to the nervous system, digestive system, upper respiratory tract, skin and eyes. |
| OTHER REMARKS | |

12. HEALTH INFORMATION

HMIS CODE: **HEALTH:** 1 **FIRE:** 2 **REACTIVITY:** 0

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|----|---------------------|----|-----------------------------|
| No | HIGHLY TOXIC | No | SENSITIZER |
| No | TOXIC | No | REPRODUCTIVE EFFECTS |
| No | CORROSIVE | No | MUTAGEN |
| No | IRRITANT | | |

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: It is the responsibility of the user to determine if the material is a hazardous waste at the time of disposal. Determine compliance status with all applicable requirements prior to disposal.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

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| PROPER SHIPPING NAME: | Petroleum distillate. |
| HAZARD CLASS: | class 6.1: poisonous material. class 3 Combustible liquid. (Flash point is 100-200F). |
| HAZARD IDENTIFICATION NUMBER: | UN 2810. Toxic liquids n.o.s. (2 butoxyethanol) |
| DOT PLACARD: | Not required for non-bulk packaging |
| COMPATIBILITY CATEGORY: | N/A |

15. REGULATORY INFORMATION

SARA SECTION 301-304—THRESHOLD PLANNING QUANTITY (TPQ):
No TPQ for product or any constituent greater than 1% or 0.1% (carcinogen).

SARA SECTION 313 - TOXIC CHEMICALS:
This product does not contain toxic chemicals under SARA Section 313 and 40 CFR Part 372.

SARA SECTION 311 - HAZARD CATEGORIES:
This product may meet one or more of the criteria for the hazard categories defined in 40 CFR Part 370 as established by Sections 311 and 312 of SARA as indicated below:

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|----|--|----|--|
| NO | IMMEDIATE (ACUTE) HEALTH HAZARD | NO | SUDDEN RELEASE OF PRESSURE HAZARD |
| NO | DELAYED (CHRONIC) HEALTH HAZARD | NO | REACTIVE HAZARD |
| NO | FIRE HAZARD | | |

SARA SECTION 302 - EXTREMELY HAZARDOUS WASTE:
This product is not known to contain any components in concentrations greater than one percent that are listed as Extremely Hazardous Substances in 40 CFR Part 355 pursuant to the requirements of Section 302(a) of SARA.

CLEAN WATER ACT (CWA):
Under the CWA, discharges of crude oil and petroleum products to surface water without proper Federal and

State permits must be reported immediately to the National Response Center at (800) 424-8802.

CERCLA HAZARDOUS SUBSTANCES:

As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof, which is not otherwise specifically listed or designated as a hazardous substance.

U.S. TSCA INVENTORY

Octylnitrate; 2 butoxyethanol

CALIFORNIA PROPOSITION 65

This product is not known to contain any components for which the State of California has found to cause cancer, birth defects or other reproductive harm.

NEW JERSEY RIGHT-TO-KNOW LABEL

Petroleum distillate. Contains 2 butoxyethanol

ADDITIONAL REGULATORY REMARKS

16. OTHER INFORMATION

The information in this Material Safety Data Sheet should be provided to all who will use, handle, store, transport, or otherwise be exposed to this product. This information was prepared for the guidance of plant engineering, operations and management and for persons working with or handling this product. Lubricants USA believes this information to be reliable and up to date as of the date of publication, but makes no warranty that it is.

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|---------------------------|-----------|------------|--------------|----------|-------------|
| NFPA HAZARD RATING | least - 0 | slight - 1 | moderate - 2 | high - 3 | extreme - 4 |
| HMIS HEALTH RATING | least - 0 | slight - 1 | moderate - 2 | high - 3 | extreme - 4 |

AP = approximately EQ = equal > = greater than < = less than NA = not applicable
 ND = no data NE = not established

- ACGIH = American Conference of Governmental Industrial Hygienists
- AIHA = American Industrial Hygiene Association
- CERCLA = Comprehensive Environmental Response, Compensation and Liability Act (1980)
- EPA = Environmental Protection Agency
- HMIS = Hazardous Materials Information System
- IARC = International Agency for Research on Cancer
- NFPA = National Fire Protection Association
- NIOSH = National Institute of Occupational Safety and Health
- NLGI = National Lubricating Grease Institute
- NPCA = National Paint and Coating Manufacturers Association
- NTP = National Toxicology Program
- OSHA = Occupational Safety and Health Administration
- RQ = Reportable quantity
- SARA = Superfund Amendments and Reauthorization Act (1986)
- TSCA = Toxic Substance Control Act