

MSDS Document

Product ULTRA LOW SULFUR DIESEL

1. Chemical Product and Company Identification

Trade Name of this Product ULTRA LOW SULFUR DIESEL

Synonyms: Fuel Oil No. 2 (defined by ASTM D-396), No. 2 Heating Oil, Home Medium Oil, No. 2 Diesel, No. 2 Distillate Fuel, Diesel Oil (Medium), ASTM No. 2-D Grade Diesel Fuel (defined by ASTM D-975), Furnace Oil, Burner Fuel No. 2

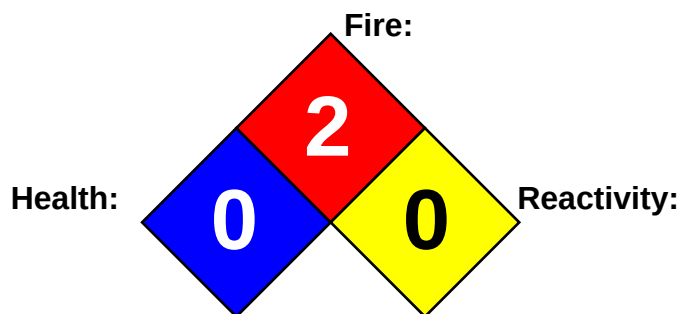
MSDS ID DRL0007

Manufacturer

DELEK Refining LTD
425 MC MURREY DRIVE
TYLER, TX 75702

CHEMTREC
800-424-9300

Revision Date 10/06/2003



Health:	1
Fire:	2
Reactivity:	0
Specific	

Specific

2. Composition and Information on Ingredients

Ingredient	CAS Number	Weight %	ACGIH TLV	PEL	STEL
Fuel oil No. 2	68476-30-2	100% - 100%	0		
Fuels, diesel, no. 2	68476-34-6	100% - 100%	0		
SUBSTANCES CONTAINED IN THIS PRODUCT INCLUDE:					
Trimethyl benzene	25551-13-7	1% - Max	0		
Pseudocumene	95-63-6	1% - Max	0		
Naphthalene	91-20-3	1% - 3%	0		

Biphenyl 92-52-4 1% - Max 0

MIXTURE OF
ADDITIVES
(ANTIOXIDANTS,
INHIBITORS, ETC)

3. Hazard Identification

EMERGENCY OVERVIEW

SIGNAL WORD

WARNING!

Physical State

Liquid

COLOR

Transparent to slightly opaque, light yellow to amber.

ODOR

Kerosene

PHYSICAL and HEALTH HAZARDS

Highly combustible liquid! Vapor may cause flash fire or explosion! May cause eye, skin, mucous membrane, and respiratory tract irritation! May be harmful or fatal if inhaled, ingested, or absorbed through the skin! Aspiration into the lungs will cause pulmonary edema and lipid or chemical pneumonia! Overexposures may cause central nervous system (CNS) depression and/or damage the lungs, liver, and kidneys! Potential skin cancer hazard! Diesel exhaust may cause upper respiratory tract irritation and reversible pulmonary effects. Potential slipping hazard on smooth, hard walking area.

ENVIRONMENTAL HAZARDS

This product, its storage tank water bottoms and sludge, and any contaminated soil or water may be hazardous to human, animal, and aquatic life. Volatile components of this product may contribute to smog.

POTENTIAL HEALTH EFFECTS

Routes of Exposure

Skin contact; Eye contact; Inhalation; Ingestion; and Skin absorption.

Signs and Symptoms of Acute Exposure

INHALATION

Breathing mist or vapors may irritate the mucous membranes of the nose, throat, bronchi, and lungs, and may cause transient central nervous system (CNS) depression, depending on the concentration and/or duration of exposure. CNS symptoms include headache, dizziness, nausea, intoxication, blurred vision, slurred speech, flushed face, confusion, weakness, fatigue, loss of consciousness, convulsions, coma, and death.

EYE CONTACT

Mild irritation may result from short-term contact with liquid, mist, and/or vapor.

SKIN CONTACT

Moderate to severe skin irritation may result from short-term contact with liquid or mist.

INGESTION

Swallowing this product may cause irritation to the mouth, throat, and stomach. A lethal dose may be as low as one-half ounce for a child and one ounce for an adult. Ingestion of less than one ounce with retention may produce nausea, vomiting, diarrhea, restlessness, sedation, inadequate respiratory and/or cardiac function, and possibly coma. Aspiration into the lungs, which is likely to occur during the vomiting of this material, will cause pneumonia.

CHRONIC HEALTH EFFECTS SUMMARY

Prolonged and/or repeated contact may cause skin defatting, redness, dryness, blistering eczema-like lesions, scaly dermatitis, and/or more serious skin disorders. Chronic effects of ingestion and subsequent aspiration into the lungs may cause pneumatocele (lung tumor) formation and chronic lung dysfunction.

This product contains Petroleum Middle Distillates similar to those shown to produce skin tumors on laboratory rodents. All tumors appeared during the latter portion of the typical 2-year lifespan of the animals. It also contains a very low concentration of Polycyclic Aromatic Hydrocarbons (PAHs or PNAs), some of which have been reported to cause skin cancer on humans under conditions of poor personal hygiene, prolonged/repeated contact and exposure to sunlight. Toxic effects are unlikely to occur if good personal hygiene is practiced.

CARCINOGENIC POTENTIAL

Please refer to Section 11 for the identification of components, if any, which have been identified as having carcinogenic potential in animals and/or humans.

4. First Aid Information

Take proper precautions to ensure your own health and safety before attempting rescue or providing first aid. For specific information refer to the Emergency Overview in Section 3 and Exposure Control in Section 8 of this MSDS.

INHALATION

Evacuate the victim to a safe, fresh air area as soon as possible. Loosen tight clothing such as a collar, tie, belt, or waistband. If breathing is difficult, administer air or oxygen. If the victim is not breathing, administer cardiopulmonary resuscitation (CPR), as necessary. **WARNING:** Persons providing mouth-to-mouth resuscitation may be placing themselves at risk, wither from exposure to toxic materials or communicable disease.

EYE CONTACT

IMMEDIATELY flush the eye(s) with large volumes of clean, low-pressure water for at least 15 minutes, occasionally lifting both the upper and lower eyelids. If pain or redness persists after flushing, obtain medical attention.

SKIN CONTACT

Remove contaminated clothing as soon as possible. Wash affected skin thoroughly with

mild soap and water. If irritation persists or if tissue appears damaged, seek medical attention. Wash contaminated clothing before reuse. Discard contaminated leather shoes and gloves.

INGESTION

DO NOT INDUCE VOMITING! Risk of damage to the lungs generally exceeds the poisoning risk. (See "Ingestion" in Section 3.) If the patient is completely conscious and alert, give one to two pints of lukewarm water or milk. Obtain medical attention IMMEDIATELY.

Notes to Physician

Aspiration of this material into the lungs will cause lipid or chemical pneumonia. As a result, induction of emesis is NOT recommended. Administer an aqueous slurry of activated charcoal followed by a cathartic such as Magnesium Citrate or Sorbitol. For quantities above a few drops, use careful gastric lavage with a tight-fitting, cuffed endotracheal tube for complete emptying. Treat symptomatically.

5. Fire Fighting Measures

Flash Point	170
FP Method	ASTM D-93
LEL	0.6
UEL	7.5

FLAMMABLE PROPERTIES

FLAMMABILITY CLASSIFICATION

Highly Combustible! OSHA/NFPA Class-II combustible liquid.

FLASH POINT/METHOD

AP 140° to 170°F (60° to 77° C) by ASTM D-93.

FLAMMABLE LIMITS %

LEL: AP 0.6 UEL: AP 7.5 (Based on NFPA "Fuel Oil No. 2")

Auto-Ignition Temperature

AP 495°F (257°C) by ASTM E-659 (Based on NFPA "Fuel Oil No.2").

Hazardous Combustion Products

Burning or excessive heating may produce smoke, Carbon Monoxide, Carbon Dioxide, and other harmful gases/vapors.

Special Properties

When heated above its flash point temperature, this material will release flammable vapors which, if exposed to an ignition source, can burn in the open or be explosive in confined spaces. Mists or sprays may be flammable at temperatures below the flash point.

A static electrical charge may accumulate as a result of transfer flow or agitation. Discharge (static spark) may ignite vapors, especially in cold, dry weather conditions. Special slow load and monitoring procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when this material is loaded into tanks previously containing Gasoline or other low flash point products. (See American Petroleum Institute Publication

2003.)

EXTINGUISHING MEDIA

SMALL FIRE

Use dry chemicals, Carbon Dioxide (CO₂), foam, water fog, or inert gas (Halon or Nitrogen).

LARGE FIRE

Use water fog, waterspray, or foam. Foam and water are effective but may cause frothing. NEVER use a water jet because it may spread the fire to a larger area.

Do not enter any enclosed or confined fire space without proper protective clothing and equipment. This must include a self-contained breathing apparatus to protect against the hazardous effects of combustion products and/or Oxygen deficiencies. Cool tanks and containers exposed to fire with water. Withdraw immediately in case of rising sound from venting safety device or discoloration of the vessel, tank, or pipeline. Be aware that burning liquid will float on water. Notify appropriate authorities if liquid(s) enter sewers or waterways.

6. Accidental Release Measures

SMALL SPILLS

Combustible Liquid! Release causes a potential fire or explosion hazard. Remove all ignition sources and safely stop flow of spill. Evacuate all non-essential personnel from immediate area, kill or isolate all ignition sources, and limit area access to only HAZWOPER-trained and properly equipped emergency personnel. Contain spill and prevent it from entering sewers or waterways. Material will float on water and its run-off may create an explosion or fire hazard. Absorb spill with an inert material and place in an appropriate waste disposal container.

LARGE SPILLS

Secure the area and control access. Verify that responders are properly HAZWOPER-trained and wearing appropriate protective clothing/equipment, including organic vapor respirators or supplied air. Dike far ahead of a liquid spill to ensure complete collection. Pick up free liquid for recycle and/or disposal if it can be accomplished safely with explosion-proof equipment. Some spills may need to be reported to the National Response Center (800-424-8802).

7. Handling and Storage

HANDLING

Keep containers closed and do not handle near heat, sparks, or open flame. A spill or leak can cause fire/explosion. Remove spillage immediately from hard, smooth walking areas. Do not contact with oxidizable materials. Do not breathe vapor. Use only with adequate ventilation/personal protection. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Prevent contact with food, chawing, or smoking materials. Do not take internally.

All electrical equipment in areas where product is handled/stored should be installed in accordance with applicable requirements of the N.F.P.A.'s national Electric Code (NEC). Do

NOT use this product as a cleaning agent. Empty containers retain some liquid and vapor residue, so all hazard precautions must be observed when handling empty containers.

STORAGE

Flammable materials should be stored in a separate safety storage cabinet or room. Keep containers tightly closed in a cool, dry, well-ventilated place. Ground all equipment containing this material. Keep away from heat and all other sources of ignition. KEEP OUT OF CHILDREN'S REACH!

8. Exposure Controls and Personal Protection

ENGINEERING CONTROLS

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the pertinent exposure limits. All electrical equipment should comply with the National Electric Code Standards. Ensure that an eyewash station and safety shower are proximal to the workstation location.

PERSONAL PROTECTIVE EQUIPMENT

Minimum Recommended: Safety Glasses, Chemical Splash Apron, Rubber Gloves

EYE PROTECTION

Safety glasses with side shields are recommended as a minimum protection. Whenever there is a likelihood of misting or splashing/spraying liquid, chemical goggles should be worn. Suitable eye wash water should be readily available. Contact lenses should not be worn when handling this product.

SKIN PROTECTION

- HANDS: Gloves (impervious, Neoprene or Nitril). Wash hands with plenty of mild soap and water before eating, drinking, smoking, using toilet facilities, or leaving work. DO NOT use Kerosene, solvents, or harsh abrasive skin cleaners.

-BODY: Avoid skin contact. If conditions of use make contact unavoidable, wear clean and impervious facial protection. Wash all exposed skin areas with plenty of mild soap and water before eating, drinking, smoking, using toilet facilities, or leaving work.

RESPIRATORY PROTECTION

For unknown vapor concentrations use a self-contained breathing apparatus (SCBA). For unknown vapor concentrations, above the exposure guidelines shown in this Section, use a NIOSH/MSHA-approved organic vapor respirator, if adequate protection is provided. Respirator use should follow OSHA requirements (29 CFR 1910.134) or equivalent.

GENERAL COMMENTS

WARNING! Use of hydrocarbon fuel in space without adequate ventilation may result in generation of hazardous level of combustion products and inadequate Oxygen levels for breathing. Odor is an inadequate warning for hazardous conditions.

Since specific exposure standards/control limits have not been established for this product, the "Oil Mist, Mineral" exposure limits shown below are suggested as minimum control guidelines.

EXPOSURE GUIDELINES

OIL MIST, MINERAL

OSHA - 2002 : TWA - 5 mg/m³ : 8 Hrs

OIL MIST, MINERAL (A2 Suspected Carcinogen)

ACGIH - 2002 : TWA - 5 mg/m³ : 8 Hrs

TRIMETHYL BENZENE

ACGIH 2002 TWA 25 ppm 8 Hrs

NAPHTHALENE

OSHA - 2002 : TWA - 10 ppm : 8 Hrs

NAPHTHALENE

ACGIH 2002 TWA 10 ppm 8 Hrs

NAPHTHALENE

ACGIH 2002 STEL 15 ppm 15 Mins

DIPHENYL

OSHA 2002 PEL 0.2 ppm 8 Hrs

BIPHENYL (DIPHENYL)

ACGIH 2002 TWA 0.2 ppm 8 Hrs

9. Physical and Chemical Properties

Product CAS Number 68476-30-2
Specific Gravity 0.82

PHYSICAL STATE

Liquid

COLOR

Transparent, clear to slightly yellow.

ODOR

Kerosene.

PH

Not applicable.

VAPOR PRESSURE

LT 0.1 psi(a) at 100 °F.

VAPOR SPECIFIC GRAVITY

AP 5.0 when Air=1 at 70°F.

VOLATILE CHARACTERISTICS

Slight (0.1 to 1.0 Wt. %)

BOILING POINT RANGE

310° to 690°F (155° to 365°C) (ASTM D-2887)

VISCOSITY

AP 2 cSt at 104°F (ASTM D-445)

MELTING/FREEZING POINT

AP - 15°F (-26°C) (ASTM D-97)

SPECIFIC GRAVITY

AP 0.81 to 0.82 at 60°F (ASTM D-1250)

ADDITIONAL PROPERTIES

Sulfur Content = LT 0.0010 WT% (by ASTM D-2622)

Cetane Number = AP 50 (ASTM D-613) or Cetane Index = AP 56 (ASTM D-976)

90% Boiling Point = EQ 570°F (299°C) (ASTM D-86)

Ash Content = LT 0.01 WT% (ASTM D-482)

Ramsbottom Carbon Residue, 10% = LT 0.03 WT% (ASTM D-524)

10. Stability and Reactivity

CHEMICAL STABILITY

Stable.

CONDITIONS TO AVOID

Keep away from heat, sparks, and open flame.

INCOMPATIBILITY WITH OTHER MATERIALS

Strong acids, alkalies, and oxidizers such as liquid Chlorine and Oxygen.

HAZARDOUS DECOMPOSITION PRODUCTS

Burning or excessive heating may produce smoke, Carbon Monoxide, Carbon Dioxide, or other harmful gases/vapors.

HAZARDOUS POLYMERIZATION

Not expected to occur.

11. Toxicological Information

FUEL OIL NO. 2:

ORAL (LD50): Acute: 12,000 to 17,500 mg/kg (Rat).

DERMAL (LD50): Acute: GT 5,000 mg/kg (Rabbit Screen Level)

GAS (LC50): Acute: GT 5,200 ppm (Rat Screen Level) (8 hours).

DRAIZE EYE: Acute: Mild Eye Irritant! (Rabbit).

DRAIZE DERMAL: Acute: Moderate Skin Irritant! (Rabbit).

BUEHLER DERMAL: Acute: Non-Sensitizing! (Guinea Pig).

28-Day DERMAL: Sub-Chronic: Severe Skin Irritant! (Rabbit).

97-Week DERMAL: Chronic: 243,000 mg/kg (Mouse) - Contact-point Skin Tumors.

--- DIESEL FUEL:

ORAL (LD50): Acute: 9.0 ml/kg (Rat).

DERMAL (LD50): Acute: GT 5.0 ml/kg (Rabbit Screen Level).

DRAIZE EYE: Acute: Non-irritating! (Rabbit).

DRAIZE DERMAL: Acute: Severe Skin Irritant! (Rabbit).

BUEHLER DERMAL: Acute: Non-Sensitizing! (Guinea Pig).

14-Day DERMAL: Sub-chronic: 0% & 67% Mortality at 4.0 & 8.0 ml/kg (Rabbit)

5-day Gas (TDLo): Sub-chronic: 0.204, 0.135, & 0.065 mg/L for 8 hours/day (Mouse)

Dose-response CNS Effects - Vasodilation, Tremors,

Dehydration, Faster Performance, & Poor Grooming.

62-Week DERMAL: Chronic: 0.05 ml/kg 3x/week (Mouse) - Extreme Skin Irritation;

No Significant Increase in Contact-point Skin Tumors. MUTAGENICITY:

modified Ames Assay: Negative! (Salmonella typhimurium).

in-vitro SCE Ovary Assay: Negative! (Chinese Hamster).

in-vitro Lymphoma Assay: Negative! (Mouse).

in-vivo Dominant Lethal Assay: Negative! (Mouse).

in-vivo Bone Marrow Assay: Positive! - Clastogenic at 2.0 ml/kg & 6.0 ml/kg (Rat).

GAS TERATOGENESIS: Sub-chronic (Days 6 thru 15 of Female Rat Pregnancy):

100 & 400 ppm = Negative! - Significant Decrease in Food

Consumption of Dams in 400 ppm Exposure Group.

--- Lifetime mouse skin painting studies have shown that Petroleum Middle Distillates (Kerosene, Jet Fuel, Diesel Fuel, Heating Oil, etc. with a boiling range of 300° to 700°F) can cause skin tumors when repeatedly applied and never washed from an animal's skin. The relative significance of these results to human health is uncertain since these Petroleum Oils were not washed from the skin and the resulting skin effects (defatting, irritation, cell damage, etc.) may play a role in the weak tumorigenic response. A few studies have shown that washing the animal's skin with soap and water between treatments greatly reduces the carcinogenic effect of some Petroleum Middle Distillates.

Studies with mice and rats have shown that some petroleum middle distillate fuels have caused bleeding damage and/or tumors or liver tumors. However, the kidney effects were sex hormonal dependant and not seen in similar studies involving guinea pigs, dogs, or monkeys. Also, the significance of liver tumors in rodents is highly speculative.

Studies with mice and rats have also show that chronic exposure (8 hours/day, 7 days/week, 24 months) to unfiltered Diesel exhaust produced lung tumors and lymphomas. On the basis of these studies, the National Institute Of Occupational Safety and Health (NIOSH) recommended that complete Diesel exhaust be regarded as a "potential carcinogen."

Numerous epidemiology studies have been carried out to test the hypothesis that lung and/or bladder cancers are associated with chronic exposure to Diesel exhaust. The most comprehensive case-control and retrospective cohort studies on U.S. railroad workers showed an increased risk of lung cancer. The cohort study indicated that the risk significantly increased with duration of exposure. There are some indications that an elevated frequency of bladder cancer amongst bus and truck drivers may be due to Diesel exhaust exposures.

Trimethylbenzenes are primary skin irritants and may cause asthmatic bronchitis and/or anemia. Based upon animal reproductive/developmental studies, Trimethylbenzenes may also cause fetal toxicity.

Naphthalene is a potential irritant to eyes, skin, and lungs and may damage the eyes (Cataracts and/or Optical Neuritis), blood (Hemolytic Anemia), and kidney following prolonged or repeated exposure. Naphthalene may also cause fetal toxicity or damage.

Biphenyl (Diphenyl) inhalation overexposures have caused poisoning characterized by liver and central and/or peripheral nerve damage. Deaths resulted from liver atrophy. Biphenyl vapors have also caused transient nausea, vomiting, flaccid paralysis, and/or bronchitis.

Materials similar to some components in this product were found to be mutagenic in "in vitro" and "in vivo" tests. The relationship between these results and possible human effects is not known.

12. Ecological Information

Fuel Oil No. 2/Diesel Fuel may be released to the environment during its production, distribution, and use. It is used as fuel in residential old burners, commercial furnaces, trucks, ships, and other automotive equipment, and also as a component of some drilling fluids and metal-working oils. It may be accidentally spilled during transportation or storage. Direct release to aquatic environments may occur if it is used in mosquito control as a coating on breeding waters.

Toxic Aromatic Hydrocarbon compounds (Trimethylbenzenes and Naphthalene) from Middle Distillate Fuels are volatile; and therefore, they may be released to the atmosphere and react with photochemically produced Hydroxyl Radicals to create smog.

Leaking underground storage tanks (LUSTs) are a major cause of groundwater contamination in the United States. If released to the soil, these Petroleum Middle Distillates will strongly absorb. But, domestic use of contaminated groundwater is still an important exposure pathway. Also, residents living/working near LUSTs can be exposed through liquid or vapor migration below ground into homes/businesses.

Petroleum-based distillate fuels will normally float on water. In stagnant or slow-flowing waterways, an oil layer can cover a large surface area. As a result, this oil layer might limit or eliminate natural atmospheric Oxygen transport into the water. Over time, if not removed, Oxygen depletion in the water may be enough to cause a fish kill or create an anaerobic environment.

No. 2 Fuel Oil/Diesel Fuel No. 2 is potentially toxic to freshwater and saltwater ecosystems. Using Rainbow Trout (*Oncorhynchus mykiss*), these fuels showed a 96-hour TLm (Median Toxic Limit) from 12 ppm to 20 ppm in ambient saltwater. A 24-hour TLm (MTL) resulted in 200 ppm when using juvenile American Shad (*Squalius cephalus*). Using Gulf Menhaden (*Brevoortia patronus*), Striped Mullet (*Mugil cephalis*), Grass Shrimp (*Palaemonetes vulgaris*), White Perch (*Perca fluviatilis*), Carp (*Cyprinus carpio*), Banded Killifish (*Fundulus diaphanous*), American Eel (*Anguilla rostrata*), and Striped Bass (*Morone saxatilis*), Fuel Oil/Diesel Fuel No. 2 showed a 96-hour LC50 of 700 ppm, 320 ppm, 135 ppm, 95 ppm, 39 ppm, 37 ppm, 31 ppm, 26 ppm, 22 ppm, and 4 ppm, respectively.

13. Disposal Considerations

Maximize product recovery for reuse or recycling. When disposing of this product, its

storage tank water bottoms, sludge, contaminated soil, or water one must assume the waste material to be an EPA "Ignitable Hazardous Waste" (D001), unless proven otherwise by through analytical testing. Use approved treatment, transporters, and disposal sites in compliance with all applicable regulations. If spilled material is introduced into a wastewater treatment system, chemical and biological oxygen demand (COD and BOD) will likely increase. This material is biodegradable if gradually exposed to microorganisms, preferably in an aerobic environment. Vapor emissions from a bio-oxidation process might prove to be a potential health hazard. Potential treatment and disposal methods include incineration, land farming, and/or bioremediation, if permitted.

14. Transportation Information

DOT Status

A U.S. Department of Transportation regulated material.

Proper Shipping Name

Fuel, Aviation, Turbine Fuel (when sold in bulk for use as Jet Fuel).

This product has a flash point of between 110° and 140°F (46° to 60°C). For bulk shipments the DOT classification is "Flammable Liquid". However, according to 49 CFR 173.120 and 173.150, this product may be reclassified as a "Combustible Liquid" and excepted from labeling requirements when shipped in non-bulk "limited quantity" containers of less than 119 gallons. This provision does not apply to "limited quantity" containers offered for transportation or transported by vessel or aircraft. It is recommended that DOT "Flammable Liquid" products which are reclassified be so identified on the bill-of-lading as "Combustible Liquid, n.o.s. (Kerosene)" with an additional number of "NA1993."

Must be shipped as flammable liquid if shipped by vessel or air.

Hazard Class

Flammable Liquid/Combustible Liquid

UN/NA ID

UN1863

Reportable Quantity

RQ (Naphthalene), BIPHENYL (DIPHENYL)

Placards

Flammable Liquid/Combustible Liquid
(See information this section - Proper Shipping Name.)

Packaging Group

PG III

Emergency Response Guide Number

128

HAZMAT STCC Number

49 122 67

MARPOL III STATUS

This product is NOT a "Marine Pollutant".

This product has a flash point of between 140° and 170°F (60° to 77°C). For bulk shipments it is classified as a "Flammable Liquid". However, according to 49 CFR 173.120 and 173.150, this product may be reclassified as a "Combustible Liquid" and excepted from labeling requirements when shipped in non-bulk "limited quantity" containers of less than 119 gallons. This provision does not apply to "limited quantity" containers offered for transportation of transported by vessel or aircraft. It is recommended that "Flammable Liquid" products which are reclassified be so identified on the bill-of-lading as "Combustible liquid, n.o.s. (FUEL OIL or DIESEL FUEL)" with an identification number of "NA1993."

15. Regulatory Information**TSCA**

All components of this product are listed on the Toxic Substance Control Act (TSCA) inventory.

SARA 302/304

The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on Reportable Quantities (RQs) in 40 CFR 355 (used for SARA 302, 304, 311 and 312). This product requires reporting under the statute.

SARA 311/312

The Superfund Amendments Reauthorization Act of 1989 (SARA) Title III requires facilities subject to this subpart to submit aggregate information of chemicals by "Hazard Category" as defined in 40 CFR 370.2. This product would be classified under the following hazard categories:

Immediate (Acute) Health and Delayed (Chronic) Health Hazards; Fire Hazard.

SARA 313

The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of an annual release report of "Toxic Chemicals" that appear in 40 CFR 372 (used for SARA 313). This information must be included in all MSDSs that are copied and distributed for this material. Components present in this product at a level which could require reporting under the statute are:

BIPHENYL (DIPHENYL) NAPHTHALENE 1,2,4-TRIMETHYL BENZENE (PSEUDOCUMENE)

CERCLA

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center of release of quantities of "Hazardous Substances" equal or greater than the "Reportable Quantities (RQs)" in 40 CFR

302.4. Components in this product at a level which could require reporting under the statute are:

NAPHTHALENE RQ: 100 Pounds (45 Kg.)
BIPHENYL (DIPHENYL) RQ: 100 Pounds (45 Kg.)

California Proposition 65

Per the California Safe Drinking Water and Toxic Enforcement Act of 1986, this product does contain an ingredient 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:

DIESEL ENGINE EXHAUST (FOLLOWING COMBUSTION)

Additional Regulatory Remarks

Toxic Substances Control Act (TSCA) - Section 12(b): Because this product contains detectable amounts of CUMENE (ISOPROPYLBENZENE), other C9 AROMATIC HYDROCARBONS, and 1,1'-BIPHENYL (DIPHENYL), it is subject to the Export Notification requirements of the Environmental Protection Agency. The Federal Hazardous Substances Act, related statutes and Consumer Product Safety Commission regulations as defined by 16 CFR 1500.14(b)(3) and 1500.83(a)(13): This product contains "Petroleum Distillates" which require special labeling if distributed in a manner intended, or packaged in a form suitable, for the use in the household or by children. Precautionary label dialogue must display the following: Contains Petroleum Distillates! May be harmful or fatal if swallowed! KEEP OUT OF REACH OF CHILDREN! DO NOT SIPHON BY MOUTH! Call physician immediately!

16. Other Information

DISCLAIMER OF LIABILITY

"The information on this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied regarding its correctness.

Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself.

The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with handling, storage, use or disposal of the product.

This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable."

REVISION INFORMATION

Version Number

00

Revision History

Created on 10/03/2003

ABBREVIATIONS

EQ = Equal LT = Less Than GT = Greater Than AP = Approximately NA = Not
Applicable ND = No Date