



Prepared according to 29CFR 1910.1200.

1	Chemical Product and Company Identification
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*LUBRIZOL SOUTHEAST ASIA (PTE) LTD
44 TANJONG PENJURU
SINGAPORE 609032
TELEPHONE: 6264 1644
FACSIMILE: 6264 2105*

Product Trade Name UA 6117
CAS Number Not applicable for mixtures.
Synonyms None.
Generic Chemical Name Mixture.
Product Type Heavy duty diesel engine oil additive.
Preparation/Revision Date 18 June 2009
Transportation Emergency Phone No. FOR TRANSPORT EMERGENCY call CHEMTREC: (+1) 703-527-3887 (outside the U.S.), 1-800-424-9300 (in the U.S.)
MSDS No. 87391214-1018576-2031920-102103

2	Hazards Identification
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Appearance Dark colored liquid.
Odor Mild
Principal Hazards Danger.

- Causes severe eye irritation risk of irreversible eye damage.
- Repeated swallowing of this material may cause adverse reproductive effects based on animal data.
- May cause respiratory tract irritation.

See Section 11 for complete health hazard information.

3	Composition/Information on Ingredients
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Hazardous Ingredients

Comp	CAS No.	Percentage (by wt.)	Carcinogen
Zinc alkyldithiophosphate	Confidential.	From 10 to 19.9 percent	N/E
p-Dodecylphenol	74499-35-7	From 1 to 4.9 percent	N/E

(N/E) - None established

4	First Aid Measures
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Eyes	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.
Skin	Wash with soap and water. Remove contaminated clothing. Get medical attention if irritation develops. Launder contaminated clothing before reuse and discard leather articles saturated with the material.
Inhalation	Remove exposed person to fresh air if adverse effects are observed. If breathing is labored, administer oxygen. If breathing has stopped, apply artificial respiration. If irritation persists or if toxic symptoms are observed, get medical attention.
Oral	DO NOT INDUCE VOMITING. Get immediate medical attention.
Additional Information	If exposed or concerned: Get medical attention.

5	Fire Fighting Measures
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Flash Point	142 °C, 287.6 °F PMCC (Typical)
Extinguishing Media	CO2, dry chemical, or foam. Water can be used to cool and protect exposed material.
Firefighting Procedures	Recommend wearing self-contained breathing apparatus. Water may cause splattering.
Unusual Fire & Explosion Hazards	None known.

6	Accidental Release Measures
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Spill Procedures	Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations. Ventilate area if spilled in confined space or other poorly ventilated areas. Prevent entry into sewers and waterways, dispose of in accordance with all federal, state and local environmental regulation. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material.
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7	Handling and Storage
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Pumping Temperature	55 °C, 131 °F
Maximum Handling Temperature	70 °C, 158 °F
Handling Procedures	Open container in a well ventilated area. Avoid breathing vapors. Keep containers closed when not in use. Do not discharge into drains or the environment, dispose to an authorized waste collection point. Use appropriate containment to avoid environmental contamination. Avoid breathing dust, fume, gas, mist, vapors or spray. Wash thoroughly after handling. Empty container contains product residue which may exhibit hazards of product.
Maximum Storage Temperature	45 °C, 113 °F
Storage Procedures	Odorous and toxic fumes may form from the decomposition of this product if stored at temperatures in excess of 113 deg F (45 deg C) for extended periods of time or if heat sources in excess of 250 deg F (121 deg C) are used.
Loading Temperature	70 °C, 158 °F

8	Exposure Controls/Personal Protection
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Exposure Limits	None established
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Other Exposure Limits	Contains mineral oil. Under conditions which may generate mists, observe the OSHA PEL of 5 mg per cubic meter, ACGIH STEL of 10 mg per cubic meter.
Engineering Controls	Use material in well ventilated area only. Additional ventilation or exhaust may be required to maintain air concentrations below recommended exposure limits.
Gloves Procedures	Use nitrile or neoprene gloves.
Eye Protection	Safety glasses. If potential for splash or mist exists, wear chemical goggles or faceshield.
Respiratory Protection	Under normal use conditions, respirator is not usually required. Use NIOSH/MSHA approved disposable dust/mist mask if the recommended exposure limit is exceeded. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator.
Clothing Recommendation	Gloves, coveralls, apron, boots as necessary to minimize contact. Wear either a chemical protective suit or apron when potential for contact with material exists. Use chemically protective boots when necessary to avoid contaminating shoes. Do not wear rings, watches or similar apparel that could entrap the material and cause a skin reaction. Launder contaminated clothing before reuse.

9	Physical and Chemical Properties
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Flash Point	142 °C, 287.6 °F PMCC (Typical)
Upper Flammable Limit	Not determined.
Lower Flammable Limit	Not determined.
Autoignition Point	Not determined.
Explosion Data	Material does not have explosive properties.
Vapor Pressure	Not determined.
pH	Not determined.
Specific Gravity	1.06 (15.6 °C)
Bulk Density	8.84 Lb/gal, 1.06 Kg/L
Water Solubility	Insoluble.
Percent Solid	Not determined.
Percent Volatile	Not determined.
Volatile Organic Compound	Not determined.
Vapor Density	Not determined.
Evaporation Rate	Not determined.
Odor	Mild
Appearance	Dark colored liquid.
Viscosity	2100 Centistokes (40 °C) 115 Centistokes (100 °C)
Odor Threshold	Not determined.
Boiling Point	Not determined.
Pour Point Temperature	-6 °C, 21 °F
Melting / Freezing Point	Not determined.

The above data are typical values and do not constitute a specification. Vapor pressure data are calculated unless otherwise noted.

10	Stability and Reactivity
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Stability	Material is normally stable at room temperature and pressure. See the Handling and Storage
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Section for further details.

Decomposition Temperature	Not determined.
Incompatibility	Acids. Oxidizing agents. Halogens and halogenated compounds.
Polymerization	Will not occur.
Thermal Decomposition	Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion. Hydrogen sulfide and alkyl mercaptans and sulfides may also be released. Under combustion conditions, oxides of the following elements will be formed: calcium, sodium, phosphorus, sulfur, zinc.
Conditions to Avoid	Not determined.

11	Toxicological Information
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-- ACUTE EXPOSURE --

Eye Irritation	Severe eye irritant. Risk of irreversible damage to eyes. Based on data from components or similar materials.
Skin Irritation	Not expected to be a primary skin irritant. Based on data from components or similar materials. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin.
Respiratory Irritation	May cause nose, throat, and lung irritation. Based on data from components or similar materials.
Dermal Toxicity	The LD50 in rabbits is > 2000 mg/Kg. Based on data from components or similar materials.
Inhalation Toxicity	No data available to indicate product or components may be a toxic inhalation hazard.
Oral Toxicity	The LD50 in rats is > 5000 mg/Kg. Based on data from components or similar materials.
Dermal Sensitization	No data available to indicate product or components may be a skin sensitizer.
Inhalation Sensitization	No data available to indicate product or components may be respiratory sensitizers.

-- CHRONIC EXPOSURE --

Chronic Toxicity	This product contains para-dodecylphenol. Rats given high, repeated daily doses of para-dodecylphenol by oral intubation experienced effects on a number of organs including adrenal, thyroid, liver, ovary, testes, bone marrow and blood cell formation. The relevance of these effects to humans is uncertain.
Carcinogenicity	This product contains mineral oils which are considered to be severely refined and not considered to be carcinogenic under IARC. All of the oils in this product have been demonstrated to contain less than 3% extractables by the IP 346 test.
Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Reproductive Toxicity	This product contains para-dodecylphenol. Rats given high, repeated daily doses of para-dodecylphenol by oral intubation experienced adverse reproductive effects. The relevance of these effects to humans is uncertain.
Teratogenicity	This product contains para-dodecylphenol. Pregnant rats given high, repeated daily doses of para-dodecylphenol by oral intubation gave birth to pups with cleft palate and skeletal malformations. The relevance of these effects to humans is uncertain.

-- ADDITIONAL INFORMATION --

Other	No other health hazards known.
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12	Ecological Information
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-- ENVIRONMENTAL TOXICITY --

Freshwater Fish Toxicity	The acute LC50 is 10 - 100 mg/L based on component data.
Freshwater Invertebrates Toxicity	Not determined.
Algal Inhibition	Not determined.
Saltwater Fish Toxicity	Not determined.
Saltwater Invertebrates Toxicity	Not determined.
Bacteria Toxicity	Not determined.
Miscellaneous Toxicity	Not determined.

-- ENVIRONMENTAL FATE --

Biodegradation	At least 25% of the components in this product show moderate biodegradation based on OECD 301-type test data. At least 25% of the components in this product show limited biodegradation based on OECD 302-type test data.
Bioaccumulation	Less than 1.0% of the components potentially bioconcentrate, based on octanol/water coefficients.
Soil Mobility	Not determined.

13	Disposal Considerations
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Waste Disposal This material, if discarded, is not a hazardous waste under RCRA Regulation 40 CFR 261. Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

14	Transport Information
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ICAO/IATA I	Not regulated.
ICAO/IATA II	UN3082 Environmentally hazardous substance, liquid, n.o.s. (Dodecylphenol), Class 9, PG III, Marine Pollutant (Dodecylphenol)
IMDG	UN3082 Environmentally hazardous substance, liquid, n.o.s. (Dodecylphenol), Class 9, PG III, Marine Pollutant (Dodecylphenol)
IMDG EMS Fire	F-A
IMDG EMS Spill	S-F
IMDG MFAG	None
MARPOL Annex II	Noxious liquid, NF, (5) n.o.s. (LUBRIZOL 3589 Contains Mineral oil), ST 2, Cat Y
USCG Compatibility	34 - Esters
U.S. DOT Bulk	UN3082 Environmentally hazardous substance, liquid, n.o.s. (Dodecylphenol) Class 9, PG III, Marine Pollutant (Dodecylphenol)
U.S. DOT Non-Bulk	Not regulated.
DOT NAERG	171
TDG Bulk	UN3082 Environmentally hazardous substance, liquid, n.o.s. (Dodecylphenol), Class 9, PG III, Marine Pollutant (Dodecylphenol)
TDG Non-Bulk	Not regulated.
Mexico	UN3082 Environmentally hazardous substance, liquid, n.o.s. (Dodecylphenol), Class 9, PG III, Marine Pollutant (Dodecylphenol)
Mexico Non-Bulk	Not regulated.
Bulk Quantity	85000 liters, 22457 gal.
Non-Bulk Quantity	207.8 liters, 55 gal.

Review classification requirements before shipping materials at elevated temperatures.

15	Regulatory Information
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-- Global Chemical Inventories --

USA	All components of this material are on the US TSCA Inventory or are exempt.
Other TSCA Reg.	None known.
EU	All components are in compliance with the EC Seventh amendment Directive 92 /32/EEC.
Japan	All components are in compliance with the Chemical Substances Control Law of Japan.
Australia	All components are in compliance with chemical notification requirements in Australia.
New Zealand	All components are in compliance with chemical notification requirements in New Zealand.
Canada	All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.
Switzerland	All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.
Korea	All components are in compliance in Korea.
Philippines	All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).
China	All components of this product are listed on the Inventory of Existing Chemical Substances in China.

-- Other U.S. Federal Regulations --

SARA Ext. Haz. Subst.	This product does not contain greater than 1.0% of any chemical substance on the SARA Extremely Hazardous Substances list.
SARA Section 313	From 10 to 19.9 percent zinc compounds; contains 1.9% as Zn.

SARA 311 Classifications

Acute Hazard	Yes
Chronic Hazard	No
Fire Hazard	No
Reactivity Hazard	No

CERCLA Hazardous Substances	None known.
FDA Approval	Not applicable.

-- State Regulations --

Cal. Prop. 65	This product contains the following chemical(s) known to the state of California to cause cancer and/or birth defects based on maximum impurity levels of components: < 0.5 ppm cadmium < 0.5 ppm arsenic < 1 ppm lead
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-- Product Registrations --

U.S. Fuel Registration	Not applicable.
U.S. Dept of Agriculture	This product has not been filed with the USDA to support H2 approvals.
NSF Nonfood Compounds Registration	This product has not been filed with the NSF to support H1 or H2 approvals.
Finnish Registration Number	Not Registered
Swedish Registration Number	Not Registered

Norwegian Registration Number Not Registered
 Danish Registration Number Not Registered
 Swiss Registration Number Not Registered
 Italian Registration Number Not Registered
 Korean Registration Number This product is registered in Korea with the Ministry of the Environment.

-- Other / International --

TDG Regulated Limit. None known.

16	Other Information
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US NFPA Codes

Health	Fire	Reactivity	Special
3	1	0	N/E

(N/E) - None established

HMIS Codes

Health	Fire	Reactivity
3	1	0

Precautionary Labels

Danger.

- Causes severe eye irritation risk of irreversible eye damage.
- Repeated swallowing of this material may cause adverse reproductive effects based on animal data.
- May cause respiratory tract irritation.

Revision Indicators

Section: 2 Principal hazards.	Changed: 31 March 2009
Section: 3 Hazardous ingredients.	Changed: 17 June 2009
Section: 4 Additional first aid measures.	Changed: 29 March 2009
Section: 4 Eyes first aid.	Changed: 29 March 2009
Section: 4 Inhalation first aid.	Changed: 29 March 2009
Section: 7 Handling procedures.	Changed: 29 March 2009
Section: 8 Clothing recommendations.	Changed: 29 March 2009
Section: 8 Eye protection.	Changed: 29 March 2009
Section: 8 Hazardous ingredients.	Changed: 17 June 2009
Section: 8 Respiratory protection.	Changed: 29 March 2009
Section: 8 Ventilation procedures.	Changed: 29 March 2009
Section: 9 Odor threshold.	Changed: 27 October 2008
Section: 9 Percent volatile.	Changed: 27 October 2008
Section: 10 Thermal decomposition.	Changed: 31 March 2009
Section: 11 Cacinogenicity.	Changed: 29 March 2009
Section: 11 Reproductive toxicity.	Changed: 29 March 2009
Section: 11 Teratogenicity.	Changed: 29 March 2009
Section: 12 Bacteria toxicity.	Changed: 31 March 2009
Section: 13 Waste disposal.	Changed: 27 October 2008
Section: 15 New Zealand	Changed: 27 October 2008
Section: 15 SARA section 311/312.	Changed: 29 March 2009
Section: 15 SARA section 313.	Changed: 31 March 2009

Section: 16 HMIS codes.
Section: 16 NFPA Codes.
Section: 16 Principal hazards.

Changed: 29 March 2009
Changed: 29 March 2009
Changed: 31 March 2009

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