



Prepared according to Global Harmonized System (GHS) standards.

1	Substance/Product Identification
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*The Lubrizol Corporation
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Wickliffe, Ohio 44092
Tel: (440) 943-4200*

Product Trade Name	FZ1205AX
CAS Number	Not applicable for mixtures.
Synonyms	None.
Generic Chemical Name	Mixture.
Recommended Use	Multipurpose.
Restrictions on use	Not determined.
Created Date	15 June 2012
Preparation/Revision Date	08 January 2014
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.	44027162-2102311-901421-102103

2	Hazards Identification
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Appearance	Clear amber colored liquid.
Odor	Mild
Classification	Hazardous to the aquatic environment (acute hazard) category 3 Hazardous to the aquatic environment (chronic hazard) category 3
Target Organs	Not determined.
Signal Word	Not determined.
Hazard statement	Harmful to aquatic life. Harmful to aquatic life with long lasting effects.
Other Hazards	None identified.
Precaution(s)	Avoid release to the environment.
Storage Procedures	Store away from oxidizers.
Disposal	All disposal practices must be in accordance with local, national and international regulations.

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
1-Dodecene, dimer, hydrogenate	Confidential.	From 10 to 19.9 percent	N/E
Hydrocarbon polymer	Confidential.	From 5 to 9.9 percent	N/E
Olefin sulfide	Confidential.	From 1 to 4.9 percent	N/E
Phosphoric acid esters/amine salt	Confidential.	From 1 to 4.9 percent	N/E
Alkenyl imidazoline	Confidential.	From 0.1 to 0.9 percent	N/E

4	First Aid Measures
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Eyes	Rinse cautiously with water for 30 minutes. Remove contact lenses, if present and easy to do. Get medical attention if eye irritation develops or persists. If eye irritation persists, get medical attention.
Skin	Wash with soap and water for 20 minutes or until chemical is removed. Remove contaminated clothing. Get medical attention if irritation develops. Launder contaminated clothing before reuse.
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. Call a poison center or doctor if exposed or you feel unwell.
Ingestion	Do NOT induce vomiting. Never give anything by mouth to a person who is losing consciousness, unconscious or convulsing.

Call a poison center or doctor if exposed or you feel unwell.

Advice for the protection of first-aid providers When providing first aid always protect yourself against exposure to chemicals or blood born diseases by wearing gloves, masks and eye protection. If providing CPR use mouthpieces, resuscitation bags, pocket masks or other ventilation devices. After providing first aid wash your exposed skin with soap and water.

Additional Information Note to physician: Treat symptomatically.

5	Fire Fighting Measures
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Flash Point	142 °C, 287.6 °F PMCC (Typical)
Extinguishing Media	CO2, dry chemical, foam, water spray, water fog. Water can be used to cool and protect exposed material.
Unsuitable Extinguishing Media	Not determined.
Firefighting Procedures	Wear full protective firegear including self-containing breathing apparatus operated in the positive pressure mode with full facepiece, coat, pants, gloves and boots. Do not direct a solid stream of water on spilled material. Use flooding amounts of water as a fog. Use water to cool containers exposed to fire. A solid stream of water will spread the burning material. Material creates a special hazard because it floats on water. Do not release chemically contaminated water into drains, soil or surface water.
Unusual Fire & Explosion Hazards	Burning may produce irritating, toxic and obnoxious fumes. Container may rupture in a fire situation. DO NOT USE a solid stream of water. See section 10 for additional information.

6	Accidental Release Measures
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Personal precaution, protective equipment and emergency procedures	Only trained personnel should be permitted in area. Personal protective equipment must be worn. Ventilate area if spilled in a confined space or other poorly ventilated area. Material on floor may be slippery.
Environmental precaution and protective procedures.	Material will float on water. Take precautions to avoid release to the environment. Do not flush into surface water, sanitary sewer or ground water system.
Methods for clean-up and removal	Pick up free liquid for recycle and/or disposal. Pump any free liquid into an appropriate closed container. Residual liquid can be absorbed on inert material. Place in metal containers for recovery or disposal. Wash spill area with soap and water.

7	Handling and Storage
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Pumping Temperature	Ambient
Maximum Handling Temperature	70 °C, 158 °F
Handling Procedures	Use with adequate ventilation. 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 eye contact. Avoid repeated or prolonged skin contact. When handling, do not eat, drink, or smoke. Avoid drinking, tasting, swallowing or ingesting this product. Avoid breathing dust, fume, gas, mist, vapors or spray. Product can accumulate static charge when handled. Equipment should be grounded. Use grounding and bonding connection when transferring material to prevent static discharge, fire and explosion. Use spark-resistant tools. Wash thoroughly after handling. Launder contaminated clothing before reuse. Do not reuse empty containers. Empty containers retain material residue. Do not cut, weld, braze, solder, drill, grind or expose containers to heat, flame, spark or other sources of ignition. Dispose of packaging or containers in accordance with local, regional, national and international regulations.
Maximum Storage Temperature	45 °C, 113 °F
Storage Procedures	Store separately from oxidizers. Take precautions to avoid release to the environment. Store in a cool, dry, well-ventilated area. 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. Store separately from incompatible materials. Keep container tightly closed. Do not store in open, unlabeled or mislabeled containers. See section 10 for incompatible materials.
Maximum Loading Temperature	70 °C, 158 °F

8	Exposure Controls/Personal Protection
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Exposure Limits	<p>EU Not applicable.</p> <p>UK Not applicable.</p> <p>Ireland Not applicable.</p> <p>India Not applicable.</p> <p>Cyprus</p>
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Not applicable.

Other Exposure Limits	Contains mineral oil. Under conditions which may generate mists, observe the OSHA PEL of 5 mg per cubic meter, ACGIH TWA of 5 mg per cubic meter.
Engineering Controls	If use generates a mist or vapor, local exhaust ventilation is recommended. Additional ventilation or exhaust may be required to maintain air concentrations below recommended exposure limits.
Personal Protective Equipment	
Respiratory Protection	Use respirator with a combination organic vapor and high efficiency filter cartridge if recommended exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites.
Eye Protection	Safety glasses. If potential for splash or mist exists, wear chemical goggles or faceshield.
Gloves Procedures	Consult clothing/glove manufacturer to determine appropriate type of glove for given situation. Gloves should always be inspected before each use and discarded if they show tears, pinholes, or signs of wear. Use good industrial hygiene practices to avoid skin contact. If contact with the material may occur wear chemically protective gloves.
Clothing Recommendation	Long sleeve shirt is recommended. Do not wear rings, watches or similar apparel that could entrap the material and cause a skin reaction. Launder contaminated clothing before reuse.
Hygiene Measures	Wash thoroughly after handling this product. Do not eat, drink or smoke when using this product.

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.
Decomposition Temperature	Not determined.
Explosion Data	Material does not have explosive properties.
Vapor Pressure	Not determined.
pH	Not determined.
Specific Gravity	0.87 (15.6 °C)
Bulk Density	7.21 Lb/gal, 0.86 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.
Water/Octanol Coefficient	Not determined.
Odor	Mild
Odor Threshold	Not determined.
Appearance	Clear amber colored liquid.
Viscosity	1500 Centipoise (-40 °C) 84 Centistokes (25 °C) 45 Centistokes (40 °C) 9 Centistokes (100 °C)
Boiling Point	Not determined.
Boiling Point Range	Not determined.
Pour Point Temperature	-51 °C, -60 °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 Section for further details.
Decomposition Temperature	Not determined.
Incompatibility	Oxidizing agents.
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: sulfur.
Conditions to Avoid	Do not expose to excessive heat, ignition sources, or oxidizing materials.

11	Toxicological Information
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-- ACUTE EXPOSURE --

Eye Irritation	Weak to moderate eye irritant. Does not meet Canadian D2B or EU R36 criteria. Based on data from similar materials.
Skin Irritation	May cause slight skin irritation. Does not meet EU R38 criteria. Based on data from 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	If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract. 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	The LC50 (4 hr.) in rats for dust or mist of this material is 5.0 - 50 mg/l. Based on data from components or similar materials.

Comp	Percentage (by wt.)	LC50 (4 Hr.)	Form
1-Dodecene, dimer, hydrogenate	From 10 to 19.9 percent	1.5mg/l	Particulate/Mist

Oral Toxicity	The LD50 in rats is > 10,000 mg/Kg. Based on data from components or similar materials. Swallowing material may cause irritation of the gastrointestinal lining, nausea, vomiting, diarrhea, and abdominal pain. Material can be aspirated into the lungs during the act of swallowing or vomiting. This could result in pulmonary edema and chemical pneumonitis.
Dermal Sensitization	Experimental data has shown that the concentration of potentially sensitizing components present in this product does not induce skin sensitization.
Inhalation Sensitization	No data available to indicate product or components may be respiratory sensitizers.
Aspiration Hazard	Not determined.

-- CHRONIC EXPOSURE --

Chronic Toxicity	No data available to indicate product or components present at greater than 1% are chronic health hazards.
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	No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.
Teratogenicity	No data available to indicate product or any components contained at greater than 0.1% may cause birth defects.

-- ADDITIONAL INFORMATION --

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

Freshwater Fish Toxicity	Not determined.
Freshwater Invertebrates Toxicity	Chronic effects expected at 10 - 100 mg/L based on component data.
Algal Inhibition	The acute EC50 is 10 - 100 mg/L based on component data.
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 302-type test data.
Bioaccumulation	25% or greater of the components potentially bioconcentrate, based on octanol/water coefficients.
Soil Mobility	Not determined.
Notes	None known.

13	Disposal Considerations
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Disposal Considerations	All disposal practices must be in accordance with local, regional, national and international regulations. Do not dispose in landfill.
Contaminated Containers or Packaging	Empty container retains product residue and can be hazardous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat, flame, sparks, static electricity, or other sources of ignition. Dispose of packaging or containers in accordance with local, regional, national and international regulations.

14	Transport Information
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ICAO/IATA I	Not regulated.
ICAO/IATA II	Not regulated.
IMDG	Not regulated.
IMDG EMS Fire	Not applicable.
IMDG EMS Spill	Not applicable.
IMDG MFAG	Not applicable.
MARPOL Annex II	Not determined.
USCG Compatibility	Not determined.
DOT NAERG	Not applicable.

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	To obtain information on the REACH compliance status of this product, please visit Lubrizol.com/REACH , or e-mail us at REACH_MSDS_INQUIRIES@Lubrizol.com
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	This product requires notification before sale in New Zealand.
Canada	All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.
Switzerland	This product requires notification before sale in Switzerland.
Korea	This product requires notification before sale 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	This product requires notification in China.
Taiwan	This product requires notification before sale in Taiwan.
Miscellaneous Regulatory Information	Not determined.

-- 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	This product does not contain greater than 1.0% (greater than 0.1% for carcinogenic substance) of any chemical substances listed under SARA Section 313.								
SARA 311 Classifications	<table border="1"> <tr> <td>Acute Hazard</td> <td>No</td> </tr> <tr> <td>Chronic Hazard</td> <td>No</td> </tr> <tr> <td>Fire Hazard</td> <td>No</td> </tr> <tr> <td>Reactivity Hazard</td> <td>No</td> </tr> </table>	Acute Hazard	No	Chronic Hazard	No	Fire Hazard	No	Reactivity Hazard	No
Acute Hazard	No								
Chronic Hazard	No								
Fire Hazard	No								
Reactivity Hazard	No								
CERCLA Hazardous Substances	None known.								

-- 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: < 0.1 ppm Naphthalene, CAS no. 91-20-3 < 1 ppm Ethyl acrylate, CAS no. 140-88-5 1 ppm Methyl isobutyl ketone, CAS no. 108-10-1 4 ppm Cumene, CAS no. 98-82-8 4 ppm Ethyl benzene, CAS no. 100-41-4
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-- Product Registrations --

U.S. Fuel Registration	Not applicable.
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

-- Other / International --

Miscellaneous Regulatory Information

Not determined.

16	Other Information
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Issuing Department

Product Safety and Compliance Department (440-943-1200)

Created Date

15 June 2012

Preparation/Revision Date

08 January 2014

US NFPA Codes

Health	Fire	Reactivity	Special
1	1	0	N/E

HMIS Codes

Health	Fire	Reactivity
1	1	0

Revision Indicators

This MSDS has no revisions since 8 January 2014

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