

Prepared according to 29CFR 1910.1200.

1	Chemical Product and Company Identification
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Product Trade Name	LLL-4-100
CAS Number	Not applicable for mixtures.
Synonyms	None.
Generic Chemical Name	Mixture.
Product Type	Multipurpose.
Preparation/Revision Date	26 September 2011

2	Hazards Identification
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Appearance	Clear to yellow liquid.
Odor	Mild
Principal Hazards	<ul style="list-style-type: none"> This material has no known health hazards.

See Section 11 for complete health hazard information.

3	Composition/Information on Ingredients
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Hazardous Ingredients	This material has no known hazards under applicable laws.
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4	First Aid Measures
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Eyes	Flush with water at least 30 minutes. Get medical attention if eye irritation develops or persists.
Skin	Wash with soap and water. Get medical attention if irritation develops. Launder contaminated clothing before reuse.
Inhalation	Remove exposed person to fresh air if adverse effects are observed.
Oral	DO NOT INDUCE VOMITING. Get immediate medical attention.
Additional Information	Note to physician: Treat symptomatically.

5	Fire Fighting Measures
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Flash Point	> 271 °C, 519.8 °F COC (Minimum)
Extinguishing Media	CO ₂ , 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	See section 10 for additional information.

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. 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	Not determined.
Maximum Handling Temperature	Not determined.
Handling Procedures	Keep containers closed when not in use. Wash thoroughly after handling. Launder contaminated clothing before reuse. Empty container contains product residue which may exhibit hazards of product. Dispose of packaging or containers in accordance with local, regional, national and international regulations.
Maximum Storage Temperature	Not determined.
Storage Procedures	See section 10 for incompatible materials.
Maximum Loading Temperature	Not determined.

8	Exposure Controls/Personal Protection
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Exposure Limits	None established
Other Exposure Limits	Contains synthetic basestock. Under conditions which may generate mists, observe the OSHA PEL of 5 mg per cubic meter, ACGIH STEL of 10 mg per cubic meter for mineral oil mists.
Engineering Controls	Use with adequate ventilation.
Gloves Procedures	Nitrile.
Eye Protection	Safety Glasses.
Respiratory Protection	Use NIOSH/MSHA approved 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.
Clothing Recommendation	Long sleeve shirt is recommended. Launder contaminated clothing before reuse.

9	Physical and Chemical Properties
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Flash Point	> 271 °C, 519.8 °F COC (Minimum)
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	0.84 (15.6 °C)
Bulk Density	7.02 Lb/gal, 0.84 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	Clear to yellow liquid.
Viscosity	98.3 Centistokes (40 °C) 14 Centistokes (100 °C)
Odor Threshold	Not determined.
Boiling Point	Not determined.
Pour Point Temperature	-48 °C, -54 °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 moderately elevated temperatures and pressures.
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.
Conditions to Avoid	Not determined.

11	Toxicological Information
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-- ACUTE EXPOSURE --

Eye Irritation	Not expected to cause eye irritation. 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 contact may cause dermatitis.
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	No data available to indicate product or components may be a toxic inhalation hazard.
Oral Toxicity	The LD50 in rats is > 10,000 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	Daily administration in the diet of rats produced some toxic effects at levels as low as 1500 ppm. In dogs, no discernable toxic effects at 1500 ppm were reported. High levels of this material in the diet caused degenerative changes in the liver, kidney, adrenal medulla, and thyroid of rats and a decrease in blood prothrombin content in rats and dogs.
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	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 limited biodegradation based on OECD 301-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.
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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.
U.S. DOT Bulk	Not regulated.
DOT NAERG	Not applicable.
U.S. DOT (Intermediate)	Not regulated.
U.S. DOT Intermediate NAERG	Not applicable.
U.S. DOT Non-Bulk	Not regulated.
U.S. DOT Non-Bulk NAERG	Not applicable.

LLL-4-100

Canada Not regulated.
 Mexico Not regulated.
 Bulk Quantity 85000 KG, 187391 lbs.
 Intermediate Quantity 11000 KG, 24251 lbs.
 Non-Bulk Quantity 400 KG, 882 lbs.

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 comply with the EU 7th Amendment and are approved for EU sales. Lubrizol must maintain records of all imports of this product into the EU. Third party importers are asked to report every import to The Lubrizol PSCD Manager (Europe), Hazelwood, Derby DE56 1QN, UK.

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 Substance Ordinance in Switzerland. Lubrizol must maintain records of all imports of this product into Switzerland. Third party importers are asked to report every import to The Lubrizol PSCD Manager (Europe), Hazelwood, Derby DE56 1QN, UK.

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.

Taiwan All components of this product are listed on the Taiwan inventory.

-- 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

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

CERCLA Hazardous Substances None known.

-- State Regulations --

Cal. Prop. 65 This product does not intentionally contain any chemicals known by the State of California to cause cancer and/or birth defects. Moreover, we do not routinely analyze its products for impurities which may be such chemicals.

-- 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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US NFPA Codes

Health	Fire	Reactivity	Special
0	1	0	N/E

(N/E) - None established

LLL-4-100

HMIS Codes

Health	Fire	Reactivity
0	1	0

Precautionary Labels

- This material has no known health hazards.

Revision Indicators

Section: 15 Taiwan

Changed: 26 September 2011
