

MATERIAL SAFETY DATA SHEET



FOOD GRADE OIL

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name ELGI FOOD GRADE OIL
CAS Number Not applicable for mixtures.
Synonyms None.
Generic Chemical Name Mixture.
Product Type Formulated Industrial Lubricant.
Preparation/Revision Date 22 August 2013
Transportation Emergency FOR TRANSPORT EMERGENCY call CHEMTREC: (+1) 703-527-3887 (outside the U.S.), 1-800-424-9300
Phone No. (in the U.S.)
MSDS No. 13455709-1422218-108331-102103

SECTION 2: HAZARDS IDENTIFICATION

Appearance Clear or yellow liquid.
Odor Mild
Principal Hazards Caution.
• May cause eye irritation.

See Section 11 for complete health hazard information.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredients:

Comp	CAS No.	Percentage (by wt.)	Carcinogen
Alkarylamine	Confidential	From 0.5 to 1.5 percent	N/E

(N/E) - None established

SECTION 4: FIRST AID MEASURES

Eyes Rinse cautiously with water for 20 minutes or until chemical is removed. Remove contact lenses, if present and easy to do. If eye irritation persists, get medical attention.
Skin Wash with soap and water for 30 minutes or until chemical is removed. Immediately remove all contaminated clothing. If skin irritation occurs, seek medical attention. Launder contaminated clothing before reuse.
Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is labored, administer oxygen. If breathing has stopped, apply artificial respiration. If experiencing respiratory symptoms call a poison center or doctor.
Oral Do NOT induce vomiting. Never give anything by mouth to a person who is losing consciousness, unconscious or convulsing. Rinse mouth and then drink plenty of water, seek medical attention. Call a poison center or doctor if exposed or you feel unwell.
Additional Information Note to physician: Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

Flash Point $\geq 246^{\circ}\text{C}$, 475°F ASTM D 56 (Typical)
Extinguishing Media CO₂, dry chemical, foam, water spray, water fog. Water can be used to cool and protect exposed material.
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 use a water jet. 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. Stop leak if safe to do so. Spills produce extremely slippery surfaces. In case of fire, evacuate area. 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. Keep material away from heat, sparks, pilot lights, static electricity and open flame. DO NOT USE a solid stream of water. See section 10 for additional information.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

Spill Procedures Evacuate all non-essential personnel. Only trained personnel should be permitted in area. Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations. Take precautions to avoid release to the environment. Eliminate all sources of heat, sparks pilot lights, static electricity and open flames. Ventilate area if spilled in confined space or other poorly ventilated areas. Shut off leak if without risk. Prevent entry into sewers and waterways, dispose of in accordance with all federal, state and local environmental regulation. Material on floors may be slippery. Small spills: contain spilled material. Transfer to secure containers. Where necessary collect using absorbent media. Larger spills: stop spill and dike area to prevent spreading, pump liquid to salvage tank. remaining liquid may be taken up on sand, clay, earth, floor absorbent or other absorbent material and shoveled into containers. Place in metal containers for recovery or disposal. Pump any free liquid into an appropriate closed container. Check under Transportation and Labeling (DOT/CERCLA) and Other Regulatory Information Section (SARA) for hazardous substances to determine regulatory reporting requirements for spills.

SECTION 7: HANDLING AND STORAGE

Pumping Temperature Not determined.

Maximum Handling Temperature
Not determined.

Handling Procedures Keep away from ignition sources such as heat, sparks and open flame. No smoking. Use with adequate ventilation. 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 prolonged exposure to heat and air. Avoid eye contact. Avoid repeated or prolonged skin contact. When handling, do not eat, drink, or smoke. Avoid inhalation of dust, aerosol, mist, spray, fume, or vapor. Use with appropriate and adequate ventilation. Avoid contact with eyes, skin and clothing. 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. All equipment should be grounded to prevent static discharges, and vented to provide for potential energy release. Do not breathe thermal decomposition products. Thoroughly clean molding and other processing equipment prior to change over to prevent cross contamination of material handling systems. Wash thoroughly after handling. Launder contaminated clothing before reuse. 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
Not determined.

Storage Procedures Keep material away from heat, sparks, pilot lights, static electricity and open flame. Store separately from oxidizers. Store in a cool, dry, well-ventilated area. Do not store in direct sunlight. Store separately from incompatible materials. Store in containers made of same material as original container. Store container tightly closed in well-ventilated place. Store in dry, well ventilated place away from sources of heat and direct sunlight. Do not store in open, unlabeled or mislabeled containers. See section 10 for incompatible materials.

Maximum Loading Temperature
Not determined.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits None established
Other Exposure Limits None known
Engineering Controls If use generates a mist or vapor, local exhaust ventilation is recommended. Prevent inhalation by providing effective general and, when necessary, local exhaust ventilation to draw spray, aerosol, fume, mist, or vapor away from workers.
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.
Eye Protection Safety glasses. If potential for splash or mist exists, wear chemical goggles or faceshield.
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.

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Clothing Recommendation Long sleeve shirt is recommended. Wear a chemically protective apron when contact with material may occur. Do not wear rings, watches or similar apparel that could entrap the material and cause a skin reaction. Launder contaminated clothing before reuse. Use good industrial hygiene practices. In case of skin contact, wash hands and arms thoroughly with soap and water to prevent a skin reaction.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Flash Point	>=246 °C, 475 °F ASTM D 56 (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	0.83 (20 °C)
Bulk Density	6.94 Lb/gal, 0.83 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	46.9 Centistokes (40 °C) 7.9 Centistokes (100 °C)
Odor Threshold	Not determined.
Boiling Point	Not determined.
Pour Point Temperature	Not determined.
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.

SECTION 10: STABILITY AND REACTIVITY

Stability	Material is normally stable at moderately elevated temperatures and pressures.
Decomposition Temperature	Not determined.
Incompatibility	Strong mineral acids and strong oxidizing agents. Avoid strong bases
Polymerization	Will not occur.
Thermal Decomposition	Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion.
Conditions to Avoid	Do not expose to excessive heat, ignition sources, or oxidizing materials. Direct sunlight. Contact with strong oxidizers.

SECTION 11: TOXICOLOGICAL INFORMATION

-- 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 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 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	No data available to indicate product or components present at greater than 1% are chronic health hazards.
Carcinogenicity	No data available to indicate any components present at greater than 0.1% may present a carcinogenic hazard.
Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

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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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SECTION 12: ECOLOGICAL INFORMATION

-- ENVIRONMENTAL TOXICITY --

Freshwater Fish Toxicity	The acute LC50 is 100 - 1000 mg/L based on component data.
Freshwater Invertebrates Toxicity	The acute LC50 is 100 - 1000 mg/L based on component data.
Algal Inhibition	The acute LC50 is 100 - 1000 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	Adequate data is not available to estimate the biodegradation potential of this material.
Bioaccumulation	1 - 10% of the components potentially bioconcentrate, based on octanol/water coefficients.
Soil Mobility	Not determined

SECTION 13: DISPOSAL CONSIDERATIONS

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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SECTION 14: TRANSPORT INFORMATION

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.
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.

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SECTION 15: REGULATORY INFORMATION

-- 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	May require notification in 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	May require notification before sale in Taiwan.

-- 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

SECTION 16: OTHER INFORMATION

US NFPA Codes

Health	Fire	Reactivity	Special
1	1	0	N/E

(N/E) - None established

HMIS Codes

Health	Fire	Reactivity
1	1	0

Revision Indicators

Section: 1 Product type.	Changed: 26 September 2012
Section: 4 Eyes first aid.	Changed: 26 September 2012
Section: 4 Inhalation first aid.	Changed: 26 September 2012
Section: 4 Oral first aid.	Changed: 26 September 2012
Section: 4 Skin first aid.	Changed: 26 September 2012
Section: 5 Extinguishing media.	Changed: 26 September 2012
Section: 5 Special firefighting procedures.	Changed: 26 September 2012
Section: 5 Unusual fire& explosion hazards.	Changed: 26 September 2012
Section: 6 Spill procedures.	Changed: 26 September 2012
Section: 7 Handling procedures.	Changed: 26 September 2012
Section: 7 Storage procedures.	Changed: 26 September 2012
Section: 8 Clothing recommendations.	Changed: 26 September 2012
Section: 8 Exposure limits.	Changed: 26 September 2012
Section: 8 Eye protection.	Changed: 26 September 2012
Section: 8 Glove protection.	Changed: 26 September 2012
Section: 8 Ventilation procedures.	Changed: 26 September 2012
Section: 10 Conditions to avoid.	Changed: 26 September 2012
Section: 10 Incompatibility.	Changed: 26 September 2012
Section: 11 Skin irritation.	Changed: 26 September 2012
Section: 12 Algae toxicity.	Changed: 22 August 2013
Section: 12 Bacteria toxicity.	Changed: 26 September 2012
Section: 12 Bioconcentration	Changed: 22 August 2013
Section: 12 Accumulation.	Changed: 26 September 2012
Section: 12 Freshwater invertebrate toxicity.	Changed: 26 September 2012
Section: 15 Taiwan	Changed: 26 September 2012
Section: 16 NFPA Codes.	Changed: 26 September 2012

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As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state, and local regulations remains the responsibility of the user.