

Material Safety Data Sheet

Dilmar Dilcut 323

Prepared according to 29CFR 1910.1200.

1 Chemical Product and Company Identification

Dilmar Oil Company
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Florence, SC 29501
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This material is to be used for research purposes only under the supervision of a technically qualified individual. The toxicological properties may have not been completely characterized. To determine your responsibilities under the Toxic Substances Control Act (TSCA), please see the Regulatory Information Section. If this material has been supplied to you under the terms of a secrecy or non-analysis agreement, the information included in this MSDS is hereby identified as "Confidential Information."

Product Trade Name Dilmar Dilcut 323

CAS Number Not applicable for mixtures.

Synonyms None.

Generic Chemical Name Mixture.

Product Type Metalworking Fluid

Preparation/Revision Date 12 May 2006

Transportation Emergency

Phone No. (CHEMTREC) 1-800-424-9300. Outside the U.S. (703) 527-3887

MSDS No. 14042296-2311025-5095670-811103

2 Hazards Identification

Appearance Clear yellow liquid.

Odor Mild

Principal Hazards CAUTION.

PROLONGED OR REPEATED CONTACT MAY CAUSE DERMATITIS.

This material is considered hazardous by the OSHA Hazard Communication Standard 29CFR 1910.1200.

See Section 11 for complete health hazard information.

3 Composition/Information on Ingredients

Hazardous Ingredients

(N/E) - None established

Comp	CAS No.	Percentage (by wt.)	Carcinogen
Olefin sulfide	Confidential.	From 0 to 10.0 percent	N/E

4 First Aid Measures

Eyes Flush with water at least 30 minutes. Get medical attention if eye irritation develops or persists.

Skin Wash with soap and water. Immediately remove contaminated clothing. Get medical attention if irritation persists. Launder contaminated clothing before reuse and discard shoes and other leather articles saturated with the material.

Inhalation Remove exposed person to fresh air if adverse effects are observed.

Oral DO NOT INDUCE VOMITING. If conscious, give 2 glasses of water. Get immediate medical attention.

Additional Information Note to physician: Treat symptomatically.

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5 Fire Fighting Measures

Flash Point > 168 °C, 334.4 °F COC (Minimum)

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.

Unusual Fire & Explosion

Hazards None known.

6 Accidental Release Measures

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.

7 Handling and Storage

Pumping Temperature Not determined.

Maximum Handling

Temperature Not determined.

Handling Procedures Keep containers closed when not in use. Wash thoroughly after handling. Empty container

contains product residue which may exhibit hazards of product.

Maximum Storage

Temperature Not determined.

Storage Procedures No special storage precautions required.

Loading Temperature Not determined.

8 Exposure Controls/Personal Protection

Exposure Limits

(s) - Skin exposure

(p) - Proposed limit

(c) - Ceiling exposure

(l) - Recommended exposure limit

Comp	Exposure Guidelines					
	OSHA		ACGIH		Other	
	TWA	STEL	TWA	STEL	TWA	STEL
Olefin sulfide	N/E	N/E	N/E	N/E	1 mg/cu. M (l)	N/E

(N/E) - None established

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. Lubrizol recommends a TLV/TWA for olefin sulfide of 1 mg/m³.

Engineering Controls Use with adequate ventilation.

Gloves Procedures Nitrile.

Eye Protection Safety Glasses.

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. 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. Do not wear rings, watches or similar apparel that could entrap the material and cause a skin reaction. Launder contaminated clothing before reuse.

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9 Physical and Chemical Properties

Flash Point	> 168 °C, 334.4 °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	0.93 (15.6 °C)
Bulk Density	Not determined.
Water Solubility	Insoluble.
Percent Solid	Not determined.
Percent Volatile	Unknown.
Percent VOC	Not determined.
Vapor Density	Not determined.
Evaporation Rate	Not determined.
Odor	Mild
Appearance	Clear yellow liquid.
Viscosity	32 cTs at 40°C
Odor Threshold	Unknown.
Boiling Point	Not determined.
Pour Point Temperature	+10°, 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

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. Hydrogen sulfide and alkyl mercaptans and sulfides may also be released. Under combustion conditions, oxides of the following elements will be formed: sulfur. Hydrogen sulfide may also be released.
Conditions to Avoid	Not determined.

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 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. Under good industrial hygiene practices where all exposure limits are observed, respiratory irritation should not be a problem.

Dermal Toxicity The LD50 in rabbits is > 2000 mg/Kg. Based on data from components or similar materials.

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Inhalation Toxicity The active ingredient in this product has been tested for acute inhalation effects in mice, guinea pigs and rats. A single 4 hour aerosol exposure in mice and guinea pigs resulted in an LC50 (maximal attainable concentration) greater than 4300 mg/m³. A single 4 hour aerosol exposure in rats resulted in an LC50 = 2170 mg/m³ in females, and an LC50 greater than 5600 mg/m³ in males. The combined LC50 for both sexes exceeded 5600 mg/m³.

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 A four week repeated dose inhalation study in rats was performed using the active ingredient in this product. Effects on the liver, lungs, kidney and nasal turbinate were noted, some of which were considered relevant only to rodents. The no-observed-adverse-effect-level (NOAEL) was determined to be 50 mg/m³. Under good industrial hygiene practices where all exposure limits are observed, this material is not expected to be an inhalation hazard.

Carcinogenicity This product is formulated with 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.

12 Ecological Information

-- 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 moderate biodegradation based on OECD 301-type test data. At least 25% of the components in this product show moderate biodegradation based on OECD 302-type test data.
Bioaccumulation	1 - 10% of the components display no potential to bioconcentrate.
Soil Mobility	Not determined.

13 Disposal Consideration

Waste Disposal This material, if discarded, is not a hazardous waste under RCRA Regulation 40 CFR 261.

14 Transport Information

ICAO/IATA (US) Not regulated.
ICAO/IATA (International) Not regulated.
IMDG Not regulated.
IMDG EMS Fire Not applicable.

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IMDG EMS Spill Not applicable.

IMDG MFAG Not applicable.

IMO Marine Vessel DO NOT TRANSPORT - ADDITIONAL INFORMATION REQUIRED

USCG Compatibility Not determined.
U.S. DOT Bulk Not regulated.
U.S. DOT Non-Bulk Not regulated.
DOT NAERG Not applicable.
TDG Bulk Not regulated.
TDG Non-Bulk Not regulated.
Mexico Not regulated.
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

-- Global Chemical Inventories --

USA All components of this material are on the US TSCA Inventory or are exempt.
Other TSCA Reg. None known.
EEC All components are in compliance with the EC Seventh amendment Directive 92/32/EEC.
Japan This product requires notification in Japan.
Australia This product requires notification before sale in Australia.
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 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	Yes
Fire Hazard	No
Reactivity Hazard	No

CERCLA Hazardous Substances None known.

FDA Approval Not applicable.

-- 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, Lubrizol does not routinely analyze its products for impurities which may be such chemicals.

-- Product Registrations --

U.S. Fuel Registration Not applicable.

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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	Not Registered
New Zealand Registration Number	Not Registered
	-- Other / International --
TDG Regulated Limit.	None known.
U.S. Tariff Heading Number	Not determined.
Schedule B Number	Not determined.

16 Other Information

US NFPA Codes

(N/E) - None established

Health	Fire	Reactivity	Special
1	1	0	N/E

HMIS Codes

Health	Fire	Reactivity
1 *	1	0

Precautionary Labels CAUTION.

_ PROLONGED OR REPEATED CONTACT MAY CAUSE DERMATITIS.

Revision Indicators This MSDS has no revisions since 12 May 2006

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