



Material Safety Data Sheet
LUBRIZOL (R) 6178, 1 GALLON

Victor
E1 FAXED
Part # 6117
1052358

1 Chemical Product and Company Identification

The Lubrizol Corporation
29400 Lakeland Boulevard
Wickliffe, Ohio 44092
440/943-4200

Product Trade Name LUBRIZOL (R) 6178, 1 GALLON
CAS Number Not applicable for mixtures.
Synonyms None.
Generic Chemical Name Mixture.
Product Type Automotive gear oil additive.
Preparation/Revision Date 31 October 2001
Transportation Emergency (CHEMTREC) 1-800-424-9300. Outside the U.S. (703) 527-3887
Phone No.
MSDS No. 0440419-2714697-9387073

2 Composition/Information on Ingredients

Hazardous Ingredients

Comp	CAS No.	Percentage (bv wt.)	Exposure Guidelines						Carcinogen
			OSHA		ACGIH		Other		
			TWA	STEL	TWA	STEL	TWA	STEL	
Long chain alkenyl phosphite	Confidential	From 10 to 19.9 percent	N/E	N/E	N/E	N/E	N/E	N/E	N/E

(s) - Skin exposure
(p) - Proposed limit
(c) - Ceiling exposure
(l) - Recommended exposure limit
(u) - Supplier recommended exposure limit
(N/E) - None established

3 Hazards Identification

Principal Hazards

CAUTION.

- MAY CAUSE SKIN IRRITATION.

See Section 11 for complete health hazard information.

4	First Aid Measures
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Oral	DO NOT INDUCE VOMITING. If conscious, give 2 glasses of water. Get immediate medical attention.
Eyes	Flush with water at least 15 minutes. Get medical attention if eye irritation develops or persists.
Skin	Wash with soap and water. 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.
Additional Information	Note to physician: Treat symptomatically.

5	Fire Fighting Measures
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Flash Point	154 Deg C, 309.2 Deg 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. Material will float on water.
Unusual Fire & Explosion Hazards	Toxic fumes, gases or vapors may evolve on burning.

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. Check under Transportation and Labeling (DOT/CERCLA) and Other Regulatory Information Section (SARA) for hazardous substances to determine regulatory reporting requirements for spills.
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7	Handling and Storage
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Maximum 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 70 Deg C, 158 Deg F

8	Exposure Controls/Personal Protection
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Ventilation Procedures 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.

9	Physical and Chemical Properties
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Flash Point 154 Deg C, 309.2 Deg 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 0.92 (15.6 Deg C)
Water Solubility Insoluble.
Percent Volatile Unknown.
Percent VOC Not determined.
Vapor Density Not determined.
Evaporation Rate Not determined.
Odor Mild

Appearance	Amber colored liquid.
Viscosity	35 Centistokes (40 Deg C) 6.3 Centistokes (100 Deg C)
Odor Threshold	Unknown.
Boiling Point	Not determined.
Pour Point	Not determined.
Temperature	
Freezing Point	Not determined.
Molecular Weight	Not determined.
Octanol/Water	Not determined.
Partition Coefficient	

The above data are typical values and do not constitute a specification.

10	Stability and Reactivity
Stability	Material can become unstable at 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. Under combustion conditions, oxides of the following elements will be formed: phosphorus.

11	Toxicological Information
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-- ACUTE EXPOSURE--

Oral Toxicity	The LD50 in rats is > 5000 mg/kg. Based on data from components or similar materials.
Eye Irritation	Not expected to cause eye irritation. Based on data from components or similar materials.
Skin Irritation	May cause skin irritation, based on data from components or similar materials. Not expected to meet EU R38 criteria. 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.
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.
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 and 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 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.

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.

12	Ecological Information
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-- ENVIRONMENTAL TOXICITY--

Freshwater Fish Toxicity The acute LC50 for freshwater fish is > 1000 ppm, 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 The acute EC50 for bacteria is > 1000 ppm, based on component data.

Miscellaneous Toxicity Not determined.

-- ENVIRONMENTAL FATE--

Biodegradation	Laboratory studies indicate limited biodegradation with non-acclimated sludge, based on component data.
Bioaccumulation	Not determined.
Soil Mobility	Not determined.

13	Disposal Consideration
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Waste Disposal	This material, if discarded, is not a hazardous waste under RCRA Regulation 40 CFR 261.
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14	Transport Information
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ICAO/IATA	Not regulated.
IMDG (Ambient)	Not regulated.
IMDG (Elevated)	Not regulated.
IMDG EMS	Not applicable.
IMDG MFAG	Not applicable.
IMO Marine Bulk	DO NOT TRANSPORT - CONTACT PSCD
USCG Compatibility	Not determined.
U.S. DOT Bulk (Ambient)	Not regulated.
U.S. DOT Bulk (Elevated)	Not regulated.
U.S. DOT Non-Bulk	Not regulated.
DOT NAERG	Not applicable.
TDG Bulk (Ambient)	Not regulated.
TDG Bulk (Elevated)	Not regulated.
TDG Non-Bulk	Not regulated.
Mexico	Not regulated.
ADR/RID (Ambient)	Not regulated.
ADR/RID (Elevated)	Not regulated.
ADG (Ambient)	Not regulated.
ADG (Elevated)	Not regulated.

15	Regulatory Information
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U.S. TSCA Inventory	All components of this material are on the US TSCA Inventory.
Other TSCA Reg.	Section 4a (Acetone). May be subject to export notification under TSCA Section 12(b).
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.
TDG Regulated Limit.	None known.
CERLA Hazardous Substances	None known.
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: < 1 ppm cadmium < 1 ppm lead < 1 ppm arsenic
U.S. Fuel Registration	Not applicable.
U.S. Dept of Agriculture	The USDA has accepted the data on this product to support H2 registrations.
U.S. Tariff Heading Number	3811.21.00.00
Schedule B Number	3811.21.0000
FDA Approval	Not applicable.
EEC EINECS	All components are in compliance with the EC Seventh amendment Directive 92/32/EEC.
Finnish Registration Number	Not Registered
Sweden Registration Number	Not Registered
Norway Registration Number	11591
Danish Registration Number	Not Registered
Switzerland Bag T Registration Number	611500
Japan METI	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.
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.
Korean Registration	6999

Number
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.
China Registration Number FC961106015
New Zealand Registration Number 33594
Malta Registration Number Not Registered
Ukraine Registration Number Not Registered

16	Other Information
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US NFPA Codes	Health	Fire	Reactivity	Special
	1	1	1	N/E

HMIS Codes	Health	Fire	Reactivity
	1	1	1

Precautionary Labels CAUTION.
 • MAY CAUSE SKIN IRRITATION.

Revision Indicators
 Section: 2 HAZARDOUS INGREDIENTS Changed: 02 August 2001
 Section: 7 HANDLING PROCEDURES Changed: 02 August 2001
 Section: 7 STORAGE PROCEDURES Changed: 02 August 2001
 Section: 10 THERMAL DECOMPOSITION Changed: 02 August 2001
 Section: 12 FRESHWATER FISH TOXICITY Changed: 02 August 2001
 Section: 15 CALIFORNIA PROPOSITION 65 Changed: 02 August 2001

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