



Prepared according to 29CFR 1910.1200.

1	<b>Chemical Product and Company Identification</b>
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**THE LUBRIZOL CORPORATION**  
 29400 Lakeland Boulevard  
 Wickliffe, OH 44092-2298  
 Phone: (440)943-1200

<b>Product Trade Name</b>	ALOX® 350
<b>CAS Number</b>	Confidential.
<b>Synonyms</b>	None.
<b>Generic Chemical Name</b>	Oxidate
<b>Product Type</b>	Metalworking fluid additive. Rust preventive component
<b>Preparation/Revision Date</b>	19 March 2007
<b>Transportation Emergency Phone No.</b>	(CHEMTREC ) 1-800-424-9300. Outside the U.S. (703) 527-3887
<b>MSDS No.</b>	14596512-1011143-1026780-811103

2	<b>Hazards Identification</b>
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<b>Appearance</b>	Brown solid.
<b>Odor</b>	Mild
<b>Principal Hazards</b>	<b>CAUTION.</b> <ul style="list-style-type: none"> <li>• <b>COMBUSTIBLE MATERIAL.</b></li> <li>• <b>MAY CAUSE EYE IRRITATION.</b></li> <li>• <b>MAY CAUSE SKIN IRRITATION.</b></li> </ul>

This material is considered hazardous by the OSHA Hazard Communication Standard 29CFR 1910.1200.  
 See Section 11 for complete health hazard information.

3	<b>Composition/Information on Ingredients</b>
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**Hazardous Ingredients**

Comp	CAS No.	Percentage (by wt.)	Carcinogen
Oxidate	Confidential.	From 70 to 79.9 percent	N/E
Asphalt	8052-42-4	From 0.5 to 1.5 percent	N/E

(N/E) - None established

<b>4</b>	<b>First Aid Measures</b>
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<b>Eyes</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice / attention.
<b>Skin</b>	Not applicable. If skin irritation occurs, get medical attention.
<b>Inhalation</b>	Not applicable.
<b>Oral</b>	DO NOT INDUCE VOMITING. If conscious, give 2 glasses of water. Get immediate medical attention.
<b>Additional Information</b>	Note to physician: Treat symptomatically.

<b>5</b>	<b>Fire Fighting Measures</b>
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<b>Flash Point</b>	82 °C, 179.6 °F PMCC (Typical)
<b>Extinguishing Media</b>	Flood with water.
<b>Firefighting Procedures</b>	Recommend wearing self-contained breathing apparatus. Water may cause splattering.
<b>Unusual Fire &amp; Explosion Hazards</b>	None known.

<b>6</b>	<b>Accidental Release Measures</b>
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<b>Spill Procedures</b>	Pick up free solid for recycle and/or disposal.
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<b>7</b>	<b>Handling and Storage</b>
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<b>Pumping Temperature</b>	Not applicable.
<b>Maximum Handling Temperature</b>	60 °C, 140 °F
<b>Handling Procedures</b>	Wash hands thoroughly after handling.
<b>Maximum Storage Temperature</b>	60 °C, 140 °F
<b>Storage Procedures</b>	No special storage precautions required.
<b>Loading Temperature</b>	60 °C, 140 °F

<b>8</b>	<b>Exposure Controls/Personal Protection</b>
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**Exposure Limits**

Comp	Exposure Guidelines					
	OSHA		ACGIH		Other	
	TWA	STEL	TWA	STEL	TWA	STEL
Asphalt	N/E	N/E	0.50 mg/cu. M	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

<b>Other Exposure Limits</b>	None known.
<b>Engineering Controls</b>	If use generates a mist or vapor, local exhaust ventilation is recommended.
<b>Gloves Procedures</b>	Not applicable.
<b>Eye Protection</b>	Safety Glasses.
<b>Respiratory Protection</b>	Use NIOSH/MSHA approved respirator with a dust/mist cartridge if the recommended exposure limit is exceeded.
<b>Clothing Recommendation</b>	When working with heated material, wear an insulated apron or an insulated chemical protective suit. Do not wear rings, watches or similar apparel that could entrap the material and cause a skin reaction.

<b>9</b>	<b>Physical and Chemical Properties</b>
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<b>Flash Point</b>	82 °C, 179.6 °F PMCC (Typical)
<b>Upper Flammable Limit</b>	Not determined.
<b>Lower Flammable Limit</b>	Not determined.
<b>Autoignition Point</b>	Not determined.
<b>Explosion Data</b>	Material does not have explosive properties.
<b>Vapor Pressure</b>	Not determined.
<b>pH</b>	Not determined.
<b>Specific Gravity</b>	0.92 (15.6 °C)
<b>Bulk Density</b>	Not determined.
<b>Water Solubility</b>	Insoluble.
<b>Percent Solid</b>	Not determined.
<b>Percent Volatile</b>	Unknown.
<b>Volatile Organic Compound</b>	Not determined.
<b>Vapor Density</b>	Not determined.
<b>Evaporation Rate</b>	Not determined.
<b>Odor</b>	Mild
<b>Appearance</b>	Brown solid.
<b>Viscosity</b>	Unknown.
<b>Odor Threshold</b>	Unknown.
<b>Boiling Point</b>	Not determined.
<b>Pour Point Temperature</b>	Not determined.
<b>Melting / Freezing Point</b>	Not determined.

*The above data are typical values and do not constitute a specification. Vapor pressure data are calculated unless otherwise noted.*

<b>10</b>	<b>Stability and Reactivity</b>
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<b>Stability</b>	Material is normally stable at moderately elevated temperatures and pressures.
<b>Decomposition Temperature</b>	Not determined.
<b>Incompatibility</b>	Strong oxidizing agents.
<b>Polymerization</b>	Will not occur.
<b>Thermal Decomposition</b>	Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion.



Conditions to Avoid Not determined.

<b>11</b>	<b>Toxicological Information</b>
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-- ACUTE EXPOSURE --

<b>Eye Irritation</b>	May cause eye irritation. Does not meet Canadian D2B or EU R36 criteria. Based on data from components or similar materials.
<b>Skin Irritation</b>	May cause skin irritation, based on data from components or similar materials. Not expected to meet EU R38 criteria.
<b>Respiratory Irritation</b>	No data available to indicate product or components may cause respiratory irritation under normal workplace conditions and good industrial hygiene practices.
<b>Dermal Toxicity</b>	The LD50 in rabbits is > 2000 mg/kg. Based on actual data.
<b>Inhalation Toxicity</b>	No data available to indicate product or components may be a toxic inhalation hazard.
<b>Oral Toxicity</b>	The LD50 in rats is > 5000 mg/Kg. Based on actual data.
<b>Dermal Sensitization</b>	No data available to indicate product or components may be a skin sensitizer.
<b>Inhalation Sensitization</b>	No data available to indicate product or components may be respiratory sensitizers.

-- CHRONIC EXPOSURE --

<b>Chronic Toxicity</b>	No data available to indicate product or components present at greater than 1% are chronic health hazards.
<b>Carcinogenicity</b>	No data available to indicate any components present at greater than 0.1% may present a carcinogenic hazard.
<b>Mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Reproductive Toxicity</b>	No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.
<b>Teratogenicity</b>	No data available to indicate product or any components contained at greater than 0.1% may cause birth defects.

-- ADDITIONAL INFORMATION --

<b>Other</b>	No other health hazards known.
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<b>12</b>	<b>Ecological Information</b>
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-- ENVIRONMENTAL TOXICITY --

<b>Freshwater Fish Toxicity</b>	Not determined.
<b>Freshwater Invertebrates Toxicity</b>	Not determined.
<b>Algal Inhibition</b>	Not determined.
<b>Saltwater Fish Toxicity</b>	Not determined.
<b>Saltwater Invertebrates Toxicity</b>	Not determined.
<b>Bacteria Toxicity</b>	Not determined.
<b>Miscellaneous Toxicity</b>	Not determined.

-- ENVIRONMENTAL FATE --

<b>Biodegradation</b>	Adequate data is not available to estimate the biodegradation potential of this material.
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**Bioaccumulation** There is no data available to evaluate this material for bioconcentration.  
**Soil Mobility** Not determined.

<b>13</b>	<b>Disposal Consideration</b>
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**Waste Disposal** This material, if discarded, is not a hazardous waste under RCRA Regulation 40 CFR 261.

<b>14</b>	<b>Transport Information</b>
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**ICAO/IATA (US)** Not regulated.  
**ICAO/IATA (International)** Not regulated.  
**IMDG** Not regulated.  
**IMDG EMS Fire** Not applicable.  
**IMDG EMS Spill** Not applicable.  
**IMDG MFAG** Not applicable.  
**IMO Marine Vessel** DO NOT TRANSPORT - ADDITIONAL INFORMATION REQUIRED  
**U.S. Barge** 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 KG, 187391 lbs.  
**Non-Bulk Quantity** 207.8 KG, 458 lbs.

*Review classification requirements before shipping materials at elevated temperatures.*

<b>15</b>	<b>Regulatory Information</b>
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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 are in compliance with the EC Seventh amendment Directive 92 /32/EEC.  
**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.  
**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.

<b>SARA 311 Classifications</b>	Acute Hazard	No
	Chronic Hazard	No
	Fire Hazard	Yes
	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, we do not routinely analyze its products for impurities which may be such chemicals.

**-- Product Registrations --**

**U.S. Fuel Registration** Not applicable.

**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** 184601

**-- Other / International --**

**TDG Regulated Limit.** None known.

**U.S. Tariff Heading Number** 2915.90.18.00

**Schedule B Number** 2915.90.0000

<b>16</b>	<b>Other Information</b>
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<b>US NFPA Codes</b>	<b>Health</b>	<b>Fire</b>	<b>Reactivity</b>	<b>Special</b>
	1	2	0	N/E



(N/E) - None established

**HMIS Codes**

Health	Fire	Reactivity
1	2	0

**Precautionary Labels**

**CAUTION.**

- **COMBUSTIBLE MATERIAL.**
- **MAY CAUSE EYE IRRITATION.**
- **MAY CAUSE SKIN IRRITATION.**

**Revision Indicators**

Section: 3 HAZARDOUS INGREDIENTS	Changed: 22 November 2006
Section: 5 UNUSUAL FIRE & EXLOSION HAZARDS	Changed: 19 March 2007
Section: 6 SPILL PROCEDURES	Changed: 19 March 2007
Section: 7 HANDLING PROCEDURES	Changed: 19 March 2007
Section: 7 STORAGE PROCEDURES	Changed: 19 March 2007
Section: 8 CLOTHING RECOMMENDATIONS	Changed: 19 March 2007
Section: 8 HAZARDOUS INGREDIENTS	Changed: 22 November 2006
Section: 8 RESPIRATORY PROTECTION	Changed: 19 March 2007
Section: 8 VENTILATION PROCEDURES	Changed: 19 March 2007
Section: 11 MUTAGENICITY	Changed: 22 November 2006
Section: 11 TERATOGENICITY	Changed: 22 November 2006
Section: 14 US BARGE	Changed: 28 November 2006

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