Chemical Product and Company Identification

The Lubrizol Corporation  
29400 Lakeland Boulevard  
Wickliffe, Ohio 44092  
Tel: (440) 943-4200


Appearance: Yellow crystalline.
Odor: Bland
Principal Hazards: Caution.
  • May cause eye irritation.

See Section 11 for complete health hazard information.

Composition/Information on Ingredients

This material contains no ingredients requiring disclosure under regulatory hazard criteria for this jurisdiction. See Section 11 for additional details.

First Aid Measures

Eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention.
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. If breathing is labored, administer oxygen. If breathing has stopped, apply artificial respiration. If irritation persists or if toxic symptoms are observed, get medical attention.
Oral: Treat symptomatically. Get medical attention.
Additional Information: Note to physician: Treat symptomatically.
## 5 Fire Fighting Measures

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>&gt; 200 °C, 392 °F</td>
</tr>
<tr>
<td>Extinguishing Media</td>
<td>Flood with water.</td>
</tr>
<tr>
<td>Firefighting Procedures</td>
<td>Wear full protective firegear including self-contained 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.</td>
</tr>
<tr>
<td>Unusual Fire &amp; Explosion Hazards</td>
<td>Solid does not readily release flammable vapors.</td>
</tr>
</tbody>
</table>

## 6 Accidental Release Measures

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spill Procedures</td>
<td>Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations. Prevent entry into sewers and waterways. Pick up free solid for recycle and/or disposal. Avoid raising a dust.</td>
</tr>
</tbody>
</table>

## 7 Handling and Storage

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pumping Temperature</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Maximum Handling</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Temperature</td>
<td></td>
</tr>
<tr>
<td>Handling Procedures</td>
<td>Avoid creating dust. Maintain good housekeeping practices. Porous materials, such as rags and sawdust may be subject to spontaneous combustion after becoming wetted with this product. Wash thoroughly after handling.</td>
</tr>
<tr>
<td>Maximum Storage</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Temperature</td>
<td></td>
</tr>
<tr>
<td>Storage Procedures</td>
<td>Store in a cool, dry location.</td>
</tr>
<tr>
<td>Loading Temperature</td>
<td>Not determined.</td>
</tr>
</tbody>
</table>

## 8 Exposure Controls/Personal Protection

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure Limits</td>
<td>None established</td>
</tr>
<tr>
<td>Other Exposure Limits</td>
<td>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. ACGIH exposure limit for wax fume is a TLV-TWA of 2mg/m3.</td>
</tr>
<tr>
<td>Engineering Controls</td>
<td>If use generates a dust, local exhaust ventilation is recommended.</td>
</tr>
<tr>
<td>Gloves Procedures</td>
<td>Use good industrial hygiene practices to avoid skin contact. If contact with the material may occur wear chemically protective gloves.</td>
</tr>
<tr>
<td>Eye Protection</td>
<td>Safety Glasses.</td>
</tr>
<tr>
<td>Respiratory Protection</td>
<td>Under normal use conditions, respirator is not usually required. Use NIOSH/MSHA approved disposable dust/mist mask if the recommended exposure limit is exceeded. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator.</td>
</tr>
<tr>
<td>Clothing Recommendation</td>
<td>Long sleeve shirt is recommended.</td>
</tr>
</tbody>
</table>

## 9 Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>&gt; 200 °C, 392 °F</td>
</tr>
<tr>
<td>Upper Flammable Limit</td>
<td>Not determined.</td>
</tr>
</tbody>
</table>
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: 0.95 (25 °C)

Bulk Density: Not determined.

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: Bland

Appearance: Yellow crystalline.

Viscosity: Not determined.

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.

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<table>
<thead>
<tr>
<th>Stability and Reactivity</th>
</tr>
</thead>
</table>

Stability: Material is normally stable at moderately elevated temperatures and pressures. Spontaneous heating may occur in items such as rags, insulation, and trash soaked with this material and exposed to air.

Decomposition Temperature: Not determined.

Incompatibility: Strong 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.

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<table>
<thead>
<tr>
<th>Toxicological Information</th>
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</thead>
</table>

-- ACUTE EXPOSURE --

Eye Irritation: May cause eye irritation. Does not meet Canadian D2B or EU R36 criteria. Based on data from components or similar materials. Particulates may cause mechanical irritation.

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 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. Ingestion of this material may cause gastrointestinal irritation.

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 contains mineral oils which are considered to be severely refined and not considered to be carcinogenic under IARC.

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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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 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.

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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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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.
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.

<table>
<thead>
<tr>
<th>15</th>
<th>Regulatory Information</th>
</tr>
</thead>
</table>

-- 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
May require notification in Japan.

Australia
All components are in compliance with chemical notification requirements in Australia.

New Zealand
May require notification before sale under New Zealand regulations.

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
This product may require notification in China.

-- Other U.S. Federal Regulations --

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

<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Chronic Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>No</td>
</tr>
<tr>
<td>Reactivity Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

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

-- Other / International --

TDG Regulated Limit.
None known.

<table>
<thead>
<tr>
<th>16</th>
<th>Other Information</th>
</tr>
</thead>
</table>

US NFPA Codes

<table>
<thead>
<tr>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
<th>Special</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td>N/E</td>
</tr>
</tbody>
</table>

(N/E) - None established

HMIS Codes

<table>
<thead>
<tr>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Precautionary Labels
Caution.
- May cause eye irritation.

Revision Indicators
Section: 2 Principal hazards. Changed: 31 March 2009
Section: 3 Hazardous ingredients. Changed: 31 March 2009
Section: 4 Oral first aid. Changed: 29 March 2009
Section: 8 Hazardous ingredients. Changed: 31 March 2009
Section: 8 Respiratory protection. Changed: 29 March 2009
Section: 8 Ventilation procedures. Changed: 12 February 2009
Section: 9 Odor threshold. Changed: 12 February 2009
Section: 9 Percent volatile. Changed: 12 February 2009
Section: 9 Viscosity. Changed: 12 February 2009
Section: 11 Oral toxicity. Changed: 14 August 2009
Section: 16 HMIS codes. Changed: 29 March 2009
Section: 16 Principal hazards. Changed: 31 March 2009
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