



The chemical identity of this substance and its code name/number is confidential business information. Do not release this MSDS to non-Corporate personnel. Requests for MSDSs from the public should be referred to the Product Safety Department.

Prepared according to Commission Regulation (EU) No 453/2010.

<b>Section 1</b>	<b>Identification of substance/mixture and of the company/undertaking</b>
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### 1.1 Product Identifier

## LUBRIZOL® 16008

Synonyms None.

### 1.2 Relevant identified uses of the substance or mixture and (uses advised against)

#### Relevant identified uses (see section 7.3 for information on REACH registered uses)

Heavy duty diesel engine oil additive.

### 1.3 Details of the supplier of the safety data sheet

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

**E-mail contact** EUSDS@lubrizol.com

### 1.4 Emergency Telephone number

FOR TRANSPORT EMERGENCY call CHEMTREC: (+1) 703-527-3887 (outside the U.S.), 1-800-424-9300 (in the U.S.)

<b>Section 2</b>	<b>Hazards Identification</b>
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### 2.1 Classification of the substance or mixture

#### (EC) No 1272/2008

Skin Irrit. 2; H315  
Eye Dam. 1; H318  
Aquatic Chronic 3; H412

#### 67/548/EC or 1999/45/EC

Xi  
R38  
R41  
R52/53

**For a full text of R- and H- phrases: See section 16**

### 2.2 Label elements

#### (EC) No 1272/2008



Danger.

Causes skin irritation.  
Causes serious eye damage.  
Harmful to aquatic life with long lasting effects.

Wear protective gloves / eye protection / face protection. Wash thoroughly after handling. Avoid release to the environment.

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs: Get medical attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

All disposal practices must be in accordance with local, national and international regulations.

#### Supplemental label information

None.

### 2.3 Other hazards

None identified.

<b>Section 3</b>	<b>Composition/Information on Ingredients</b>
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**3.2 Mixtures**

(EC) No 1272/2008

EC No.	Registration Number	Percentage (by wt.)	Name	Classification
283-392-8	01-2119493626-26	From 10 to 19.9 percent	Phosphorodithioic acid, mixed O,O-bis (1,3-dimethylbutyl and iso-Pr)esters, zinc salts	Aquatic Chronic 2; H411 Eye Dam. 1; H318 Skin Irrit. 2; H315
274-263-7	01-2119492616-28	From 10 to 19.9 percent	Benzenesulfonic acid, mono-C16-24-alkyl derivs., calcium salts	Eye Irrit. 2; H319
310-154-3	01-2119513207-49	From 0.1 to 0.9 percent	Dodecylphenol, mixed isomers (branched)	Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Eye Irrit. 2; H319 Repr. 2; H361 Skin Irrit. 2; H315

**67/548/EC or 1999/45/EC**

EC No.	Registration Number	Percentage (by wt.)	Name	Classification 67/548/EC
283-392-8	01-2119493626-26	From 10 to 19.9 percent	Phosphorodithioic acid, mixed O,O-bis (1,3-dimethylbutyl and iso-Pr)esters, zinc salts	N Xi R38 R41 R51/53
310-154-3	01-2119513207-49	From 0.1 to 0.9 percent	Dodecylphenol, mixed isomers (branched)	N Xn R36/38 R50/53 R62

<b>Section 4</b>	<b>First Aid Measures</b>
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**4.1 Description of first aid measures****Skin**

Wash with plenty of soap and water. If skin irritation occurs, get medical attention. Launder contaminated clothing before reuse.

**Eyes**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.

**Inhaled**

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

**Swallowed**

DO NOT INDUCE VOMITING. Get immediate medical attention.

**Advice for first-aid providers**

When providing first aid always protect yourself against exposure to chemicals or blood born diseases by wearing gloves, masks and eye protection. After providing first aid wash your exposed skin with soap and water.

**4.2 Most important symptoms and effects, both acute and delayed**

See section 11.

**4.3 Indication of any immediate medical attention and special treatment needed**

If exposed or concerned: Get medical attention.

<b>Section 5</b>	<b>Fire Fighting Measures</b>
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**5.1 Extinguishing Media**

CO<sub>2</sub>, dry chemical, or foam. Water can be used to cool and protect exposed material.

**5.2 Special hazards arising from substance or mixture**

Elevated temperatures can lead to the formation of irritating fumes and vapors. See section 10 for additional information.

**5.3 Advice for firefighters**

Recommend wearing self-contained breathing apparatus. Water may cause splattering.

<b>Section 6</b>	<b>Accidental Release Measures</b>
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**6.1 Personal precautions, protective equipment and emergency procedures**

Personal protective equipment must be worn. Avoid contact with skin, eyes or clothing. Ventilate area if spilled in a confined space or other poorly ventilated area.

**6.2 Environmental precautions**

Take precautions to avoid release to the environment. Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

**6.3 Methods and material for containment and cleaning up**

Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material.

**6.4 Reference to other sections**

See sections 8 and 13 for additional information.

<b>Section 7</b>	<b>Handling and Storage</b>
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**7.1 Precautions for safe handling**

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 breathing vapor. Avoid contact with eyes, skin and clothing Wash thoroughly after handling. Launder contaminated clothing before reuse. Empty container contains product residue which may exhibit hazards of product. Dispose of packaging or containers in accordance with local, regional, national and international regulations.

**Pumping Temperature**

45 °C, 113 °F

**Maximum Handling Temperature**

70 °C, 158 °F

**Maximum Loading Temperature**

70 °C, 158 °F

**7.2 Conditions for safe storage, including any incompatibilities**

Take precautions to avoid release to the environment. Odorous and toxic fumes may form from the decomposition of this product if stored at temperatures in excess of 113 deg F (45 deg C) for extended periods of time or if heat sources in excess of 250 deg F (121 deg C) are used. See section 10 for incompatible materials.

**Maximum Storage Temperature**

45 °C, 113 °F

**7.3 Specific end use(s)**

End uses are listed in an attached exposure scenario when one is required.

<b>Section 8</b>	<b>Exposure Controls/Personal Protection</b>
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**8.1 Control parameters**

None known.

**Other Exposure Limits**

Contains mineral oil. Under conditions which may generate mists, observe the OSHA PEL of 5 mg per cubic meter, ACGIH TWA of 5 mg per cubic meter.

**8.2 Exposure controls**

Material should be handled in enclosed vessels and equipment, in which case general (mechanical) room ventilation should be sufficient. Local exhaust ventilation should be used at points where dust, mist, vapors or gases can escape into the room air.

**Eye/face protection**

Chemical goggles or faceshield.

**Skin protection**

Nitrile.

Gloves, coveralls, apron, boots as necessary to minimize contact Wear either a chemical protective suit or apron when potential for contact with material exists. Do not wear rings, watches or similar apparel that could entrap the material and cause a skin reaction. Launder contaminated clothing before reuse.

**Respiratory Protection**

Use half mask respirator with an organic vapor cartridge if exposure limit is exceeded.

**Hygiene Measures**

Wash thoroughly after handling this product.

**Environmental exposure controls**

See section 6 for details.

<b>Section 9</b>	<b>Physical and Chemical Properties</b>
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**9.1 Information on basic physical and chemical properties**

<b>Appearance</b>	Dark colored liquid.
<b>Odour</b>	Mild
<b>Odour Threshold</b>	Not determined.
<b>pH</b>	Not determined.
<b>Melting / Freezing Point</b>	Not determined.
<b>Boiling Point</b>	Not determined.
<b>Boiling Point Range</b>	Not determined.
<b>Flash Point</b>	150 °C, 302 °F PMCC (Typical)
<b>Evaporation Rate</b>	Not determined.

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<b>Flammability (solid,gas)</b>	Not applicable.
<b>Lower flammability or explosive limit</b>	Not determined.
<b>Upper flammability or explosive limit</b>	Not determined.
<b>Vapour Pressure</b>	Not determined.
<b>Vapour Density</b>	Not determined.
<b>Relative density</b>	1.07 (15.6 °C)
<b>Bulk Density</b>	~ 8.88 Lb/gal, ~ 1.06 Kg/L
<b>Water Solubility</b>	Insoluble.
<b>Other solubilities</b>	Not determined.
<b>Partition coefficient: n-octanol/water</b>	Not determined.
<b>Autoignition Point</b>	Not determined.
<b>Decomposition Temperature</b>	Not determined.
<b>Viscosity</b>	3809.7 Centipoise (20 °C) 900 Centistokes (40 °C) 71 Centistokes (100 °C) 50 Centipoise (109 °C)
<b>Explosive properties</b>	Material does not have explosive properties.
<b>Oxidising properties</b>	Material is a non-oxidising substance.

## 9.2 Other information

<b>Pour Point Temperature</b>	-24 °C, -11 °F
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*The above data are typical values and do not constitute a specification.*

<b>Section 10</b>	<b>Stability and Reactivity</b>
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### 10.1 Reactivity

Carefully review all information provided in sections 10.2 - 10.6.

### 10.2 Chemical stability

Material is normally stable at room temperature and pressure. See the Handling and Storage Section for further details.

### 10.3 Possibility of hazardous reactions

Will not occur.

### 10.4 Conditions to avoid

High temperatures.

### 10.5 Incompatible materials

Acids. Oxidizing agents. Halogens and halogenated compounds.

### 10.6 Hazardous decomposition products

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: calcium, phosphorus, sulfur, zinc.

<b>Section 11</b>	<b>Toxicological Information</b>
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### 11.1 Information on toxicological effects

#### Acute toxicity

##### Oral

The LD50 in rats is > 10,000 mg/Kg. Based on data from components or similar materials.

##### Dermal

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

##### Inhalation

No data available to indicate product or components may be a toxic inhalation hazard.

#### Skin corrosion / irritation

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.

#### Serious eye damage / irritation

Severe eye irritant. Risk of irreversible damage to eyes. Based on data from components or similar materials.

**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.

**Respiratory or skin sensitization****Skin**

No data available to indicate product or components may be a skin sensitizer.

**Respiratory**

No data available to indicate product or components may be respiratory sensitizers.

**Germ cell mutagenicity**

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**

This product contains 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.

**Reproductive Toxicity**

This product contains para-dodecylphenol. Rats given high, repeated daily doses of para-dodecylphenol by oral intubation experienced adverse reproductive effects. The relevance of these effects to humans is uncertain.

This product contains para-dodecylphenol. Pregnant rats given high, repeated daily doses of para-dodecylphenol by oral intubation gave birth to pups with cleft palate and skeletal malformations. The relevance of these effects to humans is uncertain.

**STOT repeated exposure**

No data available to indicate product or components present at greater than 1% are chronic health hazards.

**Other information**

No other health hazards known.

<b>Section 12</b>	<b>Ecological Information</b>
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**12.1 Toxicity****Freshwater fish**

The acute LC50 is 10 - 100 mg/L based on component data.

**Freshwater invertebrates**

The acute EC50 is 100 - 1000 mg/L based on component data. Chronic effects expected at < 1 mg/L based on component data.

**Algae**

Not determined.

**Saltwater fish**

Not determined.

**Saltwater invertebrates**

Not determined.

**Bacteria**

The acute EC50 is 100 - 1000 ppm based on component data.

**12.2 Persistence and degradability**

Substance	Pct. (weight)	Test type	Duration (days)	Pct. degradation
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts	From 10 to 19.9 percent	Sturm	28	1.5
Dodecylphenol, mixed isomers (branched)	From 0.1 to 0.9 percent	Miscellaneous-Degradation	56	10
Dodecylphenol, mixed isomers (branched)	From 0.1 to 0.9 percent	Sturm	28	25

**12.3 Bioaccumulative potential**

Substance	Pct. (weight)	Test type	Duration (days)	Log Kow or BCF
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts	From 10 to 19.9 percent	Octanol-Water Coefficient	0.1	0.6
Dodecylphenol, mixed isomers (branched)	From 0.1 to 0.9 percent	Bioconcentration Factor	27	2.9
Dodecylphenol, mixed isomers (branched)	From 0.1 to 0.9 percent	Octanol-Water Coefficient	0.1	7.1

**12.4 Mobility in soil**

Not applicable.

**12.5 Results of PBT and vPvB assessment**

Not Available

**12.6 Other adverse effects**

None known.

<b>Section 13</b>	<b>Disposal Considerations</b>
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**13.1 Waste treatment methods**

All disposal practices must be in accordance with local, regional, national and international regulations. Do not dispose in landfill.

Dispose of packaging or containers in accordance with local, regional, national and international regulations.

<b>Section 14</b>	<b>Transport Information</b>
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**14.1 UN number**

<b>ADR/RID</b>	Not regulated
<b>ICAO</b>	Not regulated
<b>IMDG</b>	Not regulated

**14.2 UN proper shipping name**

<b>ADR/RID</b>	Not regulated
<b>ICAO</b>	Not regulated
<b>IMDG</b>	Not regulated

**14.3 Transport hazard class(es)**

<b>ADR/RID</b>	Not regulated
<b>ICAO</b>	Not regulated
<b>IMDG</b>	Not regulated

**14.4 Packing group**

<b>ADR/RID</b>	Not regulated
<b>ICAO</b>	Not regulated
<b>IMDG</b>	Not regulated

**14.5 Environmental hazards**

<b>ADR/RID</b>	Not applicable.
<b>ICAO</b>	Not applicable.
<b>IMDG</b>	Not applicable.

**14.6 Special precautions for users**

Review classification requirements before shipping materials at elevated temperatures.

**14.7 Transport in bulk according to Annex II of Marpol 73/78 and the IBC code**

Noxious liquid, NF, (5) n.o.s. (LUBRIZOL 16008 Contains Mineral oil), ST 2, Cat Y

<b>Section 15</b>	<b>Regulatory Information</b>
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**15.1 Safety, health and environment regulations / legislation specific for the substance or mixture****Global Chemical Inventories**

<b>Australia</b>	All components are in compliance with chemical notification requirements in Australia.
<b>Canada</b>	All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.
<b>China</b>	All components of this product are listed on the Inventory of Existing Chemical Substances in China.
<b>EU</b>	All components are in compliance with the EC Seventh amendment Directive 92/32/EEC.
<b>Japan</b>	All components are in compliance with the Chemical Substances Control Law of Japan.
<b>Korea</b>	All components are in compliance in Korea.
<b>New Zealand</b>	All components are in compliance with chemical notification requirements in New Zealand.
<b>Philippines</b>	All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).
<b>Switzerland</b>	All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.
<b>Taiwan</b>	All components of this product are listed on the Taiwan inventory.
<b>USA</b>	All components of this material are on the US TSCA Inventory or are exempt.

**German water hazard classes**

WGK = 2 according to the Water Hazardous Directive, VwVwS, dated May 17, 1999.

**15.2 Chemical safety assessment**

No chemical safety assessment has been carried out.

<b>Section 16</b>	<b>Other Information</b>
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**Created by**

Product Safety and Compliance Department (440-943-1200)

**Created Date**

18 December 2007

**Revision date**

26 January 2012

**SDS No.**

21396302-2426521-2018221-102103

**HMIS Codes**

Health	Fire	Reactivity
3	1	0

**Relevant R Phrases**

- R36/38 -- Irritating to eyes and skin.
- R38 -- Irritating to skin.
- R41 -- Risk of serious damage to eye.
- R50/53 -- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R51/53 -- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R52/53 -- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R62 -- Possible risk of impaired fertility.

**Relevant hazard phrases**

- H315 - Causes skin irritation.
- H318 - Causes serious eye damage.
- H319 - Causes serious eye irritation.
- H361 - Suspected of damaging fertility or the unborn child.
- H400 - Very toxic to aquatic life.
- H410 - Very toxic to aquatic life with long lasting effects.
- H411 - Toxic to aquatic life with long lasting effects.
- H412 - Harmful to aquatic life with long lasting effects.

**Revision Indicators**

- |                                      |                          |
|--------------------------------------|--------------------------|
| Section: 2 Storage procedures.       | Changed: 21 March 2011   |
| Section: 3 CLP Hazardous Ingredients | Changed: 12 January 2012 |
| Section: 3 EU hazardous ingredients. | Changed: 12 January 2012 |
| Section: 15 Taiwan                   | Changed: 8 July 2011     |
| Section: 16 Relevant hazard phrases  | Changed: 8 July 2011     |

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