1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Ashland Regulatory Information Number 1-800-325-3751
P.O. Box 2219 Telephone 614-790-3333
Columbus, OH 43216 Emergency telephone 1-800-ASHLAND (1-800-274-5263)

Product name PREMIUM BLUE® HEAVY DUTY DIESEL SAE 15W-40 ENGINE OIL

Product code VV70509
Product Use Description No data

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance: liquid, amber

CAUTION! PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION.

Potential Health Effects

Exposure routes
Inhalation, Skin contact, Eye Contact, Ingestion

Eye contact
May cause mild eye irritation. Symptoms include stinging, tearing, and redness.

Skin contact
May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns.

Ingestion
Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.
Inhalation

It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

Aggravated Medical Condition

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (for example, asthma-like conditions).

Symptoms

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways).

Target Organs

No data

Carcinogenicity

This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA). Used motor oil has been shown to cause skin cancer in laboratory animals continually exposed by repeated applications. Avoid prolonged or repeated skin contact.

Reproductive hazard

Based on the available information, risk to the fetus from maternal exposure to this material cannot be assessed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>CAS-No.</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEAVY PARAFFINIC DISTILLATE</td>
<td>64742-54-7</td>
<td>70&lt;80%</td>
</tr>
<tr>
<td>Distillates (Petroleum), Hydrotreated Heavy Paraffinic</td>
<td>64742-54-7</td>
<td>10&lt;15%</td>
</tr>
<tr>
<td>ZINC COMPOUNDS</td>
<td>68649-42-3</td>
<td>1.5&lt;5%</td>
</tr>
</tbody>
</table>
4. FIRST AID MEASURES

Eyes
If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

Skin
Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

Ingestion
Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation
If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

Notes to physician
Hazards: Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Repeated aspiration of small quantities of mineral oil can produce chronic inflammation of the lungs (i.e. lipoid pneumonia) that may progress to pulmonary fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.

Treatment: No information available.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Carbon dioxide (CO2), Dry chemical, Foam, Water spray
Hazardous combustion products
   carbon dioxide and carbon monoxide, oxides of sulfur, nitrogen and phosphorus, various hydrocarbons

Precautions for fire-fighting
   Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). DO NOT direct a solid stream of water or foam into hot, burning pools of liquid since this may cause frothing and increase fire intensity. Frothing can be violent and possibly endanger any firefighter standing too close to the burning liquid.

NFPA Flammable and Combustible Liquids Classification
   Combustible Liquid Class IIIB

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
   For personal protection see section 8. Spills of this material are very slippery.

Environmental precautions
   Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

Methods for cleaning up
   Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source, dike area of spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers.

Other information
   Notify the proper authorities as required that a spill has occurred. Comply with all applicable federal, state, and local regulations.

7. HANDLING AND STORAGE

Handling
Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed.

Storage
Store in a cool, dry, ventilated area, away from incompatible substances.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

<table>
<thead>
<tr>
<th>AROMATIC HYDROCARBON</th>
<th>OSHA Z1 Permissible exposure limit</th>
<th>500 ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA Z1 Permissible exposure limit</td>
<td>2,000 mg/m³</td>
<td></td>
</tr>
<tr>
<td>OSHA Z1A time weighted average</td>
<td>400 ppm</td>
<td></td>
</tr>
<tr>
<td>OSHA Z1A time weighted average</td>
<td>1,600 mg/m³</td>
<td></td>
</tr>
<tr>
<td>US CA OEL Time Weighted Average (TWA) Permissible Exposure Limit (PEL):</td>
<td>400 ppm</td>
<td></td>
</tr>
<tr>
<td>US CA OEL Time Weighted Average (TWA) Permissible Exposure Limit (PEL):</td>
<td>1,600 mg/m³</td>
<td></td>
</tr>
<tr>
<td>ACGIH time weighted average</td>
<td>5 mg/m³ Mist.</td>
<td></td>
</tr>
<tr>
<td>ACGIH Short term exposure limit</td>
<td>10 mg/m³ Mist.</td>
<td></td>
</tr>
<tr>
<td>ACGIH NIC time weighted average</td>
<td>0.2 mg/m³ Inhalable fraction.</td>
<td></td>
</tr>
</tbody>
</table>

General advice
These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

Exposure controls
General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Eye protection
Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

**Skin and body protection**

Not normally required. However, wear resistant gloves such as nitrile rubber to prevent irritation which may result from prolonged or repeated skin contact with product. Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

**Respiratory protection**

Respiratory protection is not required under normal conditions of use.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>liquid</td>
</tr>
<tr>
<td>Form</td>
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</tr>
<tr>
<td>Colour</td>
<td>amber</td>
</tr>
<tr>
<td>Odour</td>
<td>hydrocarbon-like</td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>(&gt;424.9 °F / 218.3 °C)</td>
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<tr>
<td>Melting point/range</td>
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<tr>
<td>Sublimation point</td>
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<tr>
<td>pH</td>
<td>no data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>(&gt;199.00 °C Cleveland open cup)</td>
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<tr>
<td>Ignition temperature</td>
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</tr>
<tr>
<td>Evaporation rate</td>
<td>no data available</td>
</tr>
<tr>
<td>Lower explosion limit/Upper explosion limit</td>
<td>1 %(V) / 6 %(V)</td>
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<tr>
<td>Particle size</td>
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<tr>
<td>Vapour pressure</td>
<td>0.013 hPa @ 70.00 °F / 21.11 °C Calculated Vapor Pressure</td>
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<tr>
<td>Relative vapour density</td>
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<tr>
<td>Density</td>
<td>0.8744 g/cm³ @ 60.01 °F / 15.56 °C</td>
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<tr>
<td>Bulk density</td>
<td>7.27 lb/gal @ 60.1 °F / 15.6 °C</td>
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<tr>
<td>Water solubility</td>
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<tr>
<td>Solubility</td>
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<td>Partition coefficient: n-octanol/water</td>
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<td>log Pow</td>
<td>no data available</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>no data available</td>
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</table>
10. STABILITY AND REACTIVITY

Stability
Stable

Conditions to avoid
None known.

Incompatible products
Strong oxidizing agents

Hazardous decomposition products
carbon dioxide and carbon monoxide, oxides of sulfur, nitrogen and phosphorus, various hydrocarbons

Hazardous reactions
No data

Thermal decomposition
No data

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity
HEAVY PARAFFINIC DISTILLATE
LD 50 Rate: > 15 g/kg

Distillates (Petroleum), Hydrotreated Heavy Paraffinic
LD 50 Rate: > 15 g/kg

ZINC COMPOUNDS
LD 50 Rate: 2,000 - 5,000 mg/kg
Acute inhalation toxicity
HEAVY PARAFFINIC DISTILLATE : no data available
Distillates (Petroleum), Hydrotreated Heavy Paraffinic : no data available
ZINC COMPOUNDS : no data available

Acute dermal toxicity
HEAVY PARAFFINIC DISTILLATE : LD 50 Rabbit: > 5 g/kg
Distillates (Petroleum), Hydrotreated Heavy Paraffinic : LD 50 Rabbit: > 5 g/kg
ZINC COMPOUNDS : LD 50 Rabbit: (> 2,000 mg/kg

12. ECOLOGICAL INFORMATION

Biodegradability
HEAVY PARAFFINIC DISTILLATE : no data available
Distillates (Petroleum), Hydrotreated Heavy Paraffinic : no data available
ZINC COMPOUNDS : no data available

Bioaccumulation
HEAVY PARAFFINIC DISTILLATE : no data available
Distillates (Petroleum), Hydrotreated Heavy Paraffinic : no data available
ZINC COMPOUNDS : no data available

Ecotoxicity effects
Toxicity to fish
HEAVY PARAFFINIC DISTILLATE : no data available
Distillates (Petroleum), Hydrotreated Heavy Paraffinic : no data available
PREMIUM BLUE® HEAVY DUTY DIESEL
SAE 15W-40 ENGINE OIL
VV70509

ZINC COMPOUNDS : no data available

Toxicity to daphnia and other aquatic invertebrates.
HEAVY PARAFFINIC DISTILLATE : no data available
Distillates (Petroleum), Hydrotreated Heavy Paraffinic : no data available
ZINC COMPOUNDS : no data available

Toxicity to algae
HEAVY PARAFFINIC DISTILLATE : no data available
Distillates (Petroleum), Hydrotreated Heavy Paraffinic : no data available
ZINC COMPOUNDS : no data available

Toxicity to bacteria
HEAVY PARAFFINIC DISTILLATE : no data available
Distillates (Petroleum), Hydrotreated Heavy Paraffinic : no data available
ZINC COMPOUNDS : no data available

Biochemical Oxygen Demand (BOD)
HEAVY PARAFFINIC DISTILLATE : no data available
Distillates (Petroleum), Hydrotreated Heavy Paraffinic : no data available
ZINC COMPOUNDS : no data available

Chemical Oxygen Demand (COD)
HEAVY PARAFFINIC DISTILLATE : no data available
Distillates (Petroleum), Hydrotreated Heavy Paraffinic : no data available
ZINC COMPOUNDS : no data available
13. DISPOSAL CONSIDERATIONS

Waste disposal methods
Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution's Environmental Services Group at 800-637-7922.

14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>REGULATION</th>
<th>ID NUMBER</th>
<th>PROPER SHIPPING NAME</th>
<th>*HAZARD CLASS</th>
<th>SUBSIDIARY HAZARDS</th>
<th>PACKING GROUP</th>
<th>MARINE POLLUTANT / LTD. QTY.</th>
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</thead>
<tbody>
<tr>
<td>MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES</td>
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<tr>
<td>INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER</td>
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<td>Not dangerous goods</td>
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<tr>
<td>INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO</td>
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<td>Not dangerous goods</td>
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<tr>
<td>INTERNATIONAL MARITIME DANGEROUS GOODS</td>
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<td>Not dangerous goods</td>
</tr>
<tr>
<td>TRANSPORT CANADA - INLAND WATERWAYS</td>
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<td>Not dangerous goods</td>
</tr>
<tr>
<td>TRANSPORT CANADA - RAIL</td>
<td></td>
<td></td>
<td></td>
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<td>Not dangerous goods</td>
</tr>
</tbody>
</table>
Not dangerous goods

TRANSPORT CANADA - ROAD

Not dangerous goods

U.S. DOT - INLAND WATERWAYS

Not dangerous goods

U.S. DOT - RAIL

Not dangerous goods

U.S. DOT - ROAD

Not dangerous goods

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

15. REGULATORY INFORMATION

California Prop. 65
Proposition 65 warnings are not required for this product based on the results of a risk assessment.

SARA Hazard Classification
No SARA Hazards

Acute Health Hazard

SARA 313 Component(s)
ZINC COMPOUNDS 1.59 %

New Jersey RTK Label Information
HEAVY PARAFFINIC DISTILLATE 64742-54-7
LUBRICANT ADDITIVE Distillates (Petroleum), Hydrotreated Heavy Paraffinic 64742-54-7
PREMIUM BLUE® HEAVY DUTY DIESEL
SAE 15W-40 ENGINE OIL
VV70509

AROMATIC HYDROCARBON
ZINC COMPOUNDS
ZINC COMPOUNDS 68649-42-3

Pennsylvania RTK Label Information
HEAVY PARAFFINIC DISTILLATE 64742-54-7
LUBRICANT ADDITIVE
Distillates (Petroleum), Hydrotreated Heavy Paraffinic 64742-54-7
AROMATIC HYDROCARBON

Notification status
US. Toxic Substances Control Act y (positive listing)
Canada. Canadian Environmental Protection Act (CEPA). y (positive listing)
Australia. Industrial Chemical (Notification and Assessment) Act y (positive listing)
New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand n (Negative listing)
Japan. Kashin-Hou Law List n (Negative listing)
Korea. Toxic Chemical Control Law (TCCL) List y (positive listing)
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act n (Negative listing)
China. Inventory of Existing Chemical Substances y (positive listing)

Reportable quantity - Product
US. EPA CERCLA Hazardous Substances (40 CFR 302) 62500 lbs

Reportable quantity-Components
ARSENIC 7440-38-2 1 lbs

<table>
<thead>
<tr>
<th></th>
<th>HMIS</th>
<th>NFPA</th>
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</thead>
<tbody>
<tr>
<td>Health</td>
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<td>1</td>
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<tr>
<td>Flammability</td>
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<tr>
<td>Physical hazards</td>
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<td>Instability</td>
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<tr>
<td>Specific Hazard</td>
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</tr>
</tbody>
</table>

16. OTHER INFORMATION
The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).