		Page: 1
SAFETY DATA SHEET		Revision Date: 01/12/2017
		Print Date: 5/22/2017
		SDS Number: R0306034
Premium Blue™ Heavy Duty Diesel SAE 15W-40 Engine Oil VV70509		Version: 1.6

29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade name : Premium Blue™ Heavy Duty Diesel SAE 15W-40 Engine Oil

Relevant identified uses of the substance or mixture and uses advised against

Details of the supplier of the safety data sheet Valvoline LLC 3499 Blazer Parkway Lexington, KY 40509 United States of America (USA) 1-800-TEAMVAL	Emergency telephone number 1-800-VALVOLINE Regulatory Information Number 1-800-TEAMVAL Product Information 1-800-TEAMVAL
---	--

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

GHS label elements

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

Other hazards


None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components


Chemical name	CAS-No.	Classification	Concentration (%)
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).	5.2547
HYDROTREATED LIGHT	64742-55-8	Asp. Tox. 1; H304	1.1945

		Page: 2
SAFETY DATA SHEET		Revision Date: 01/12/2017
		Print Date: 5/22/2017
		SDS Number: R0306034
Premium Blue™ Heavy Duty Diesel SAE 15W-40 Engine Oil		Version: 1.6
VV70509		

PARAFFINIC DISTILLATE			
ZINC BIS[O-(6-METHYLHEPTYL)]BIS[O-SEC-BUTYL]BIS(DITHIOPHOSPHATE)	93819-94-4	Skin Irrit. 2; H315 Eye Dam. 1; H318	1.036

SECTION 4. FIRST AID MEASURES

- General advice : No hazards which require special first aid measures.
- If inhaled : If breathed in, move person into fresh air.
If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.
- In case of eye contact : Remove contact lenses.
Protect unharmed eye.
- If swallowed : Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : 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. lipid 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.
- 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)
- Notes to physician : No hazards which require special first aid measures.

		Page: 3
SAFETY DATA SHEET		Revision Date: 01/12/2017
		Print Date: 5/22/2017
		SDS Number: R0306034
Premium Blue™ Heavy Duty Diesel SAE 15W-40 Engine Oil		Version: 1.6
VV70509		

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Water spray
Foam
Carbon dioxide (CO₂)
Dry chemical
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : carbon dioxide and carbon monoxide
Hydrocarbons
nitrogen oxides (NO_x)
zinc oxide
Sulphur oxides
hydrogen sulfide
mercaptans
- Specific extinguishing methods : Product is compatible with standard fire-fighting agents.
- Further information : Standard procedure for chemical fires.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.
- Other information : Comply with all applicable federal, state, and local regulations.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Smoking, eating and drinking should be prohibited in the application area.
For personal protection see section 8.

SAFETY DATA SHEET

Revision Date: 01/12/2017

Print Date: 5/22/2017

SDS Number: R0306034

Premium Blue™ Heavy Duty Diesel SAE 15W-40 Engine Oil

Version: 1.6

VV70509

Materials to avoid : No materials to be especially mentioned.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	TWA	5 mg/m3 Mist	OSHA Z-1
		TWA	5 mg/m3 Inhalable fraction	ACGIH
		TWA	5 mg/m3 Mist	OSHA P0
		TWA	5 mg/m3 Mist	NIOSH REL
		ST	10 mg/m3 Mist	NIOSH REL
		PEL	5 mg/m3 particulate	CAL PEL

Hazardous components without workplace control parameters

Components	CAS-No.

Engineering measures : 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.

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

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 : Wear resistant gloves (consult your safety equipment supplier).
Wear as appropriate:
Safety shoes

Hygiene measures : General industrial hygiene practice.

**SAFETY DATA SHEET**

Revision Date: 01/12/2017

Print Date: 5/22/2017

SDS Number: R0306034


Premium Blue™ Heavy Duty Diesel SAE 15W-40 Engine Oil

Version: 1.6

VV70509

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: liquid
Colour	: amber
Odour	: hydrocarbon-like
Odour Threshold	: No data available
pH	: No data available
Melting point/freezing point	: No data available
Boiling point/boiling range	: > 424.9 °F / 218.3 °C
Flash point	: > 199 °C Method: Cleveland open cup
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit	: 6 %(V) Calculated Explosive Limit
Lower explosion limit	: 1 %(V) Calculated Explosive Limit
Vapour pressure	: 0.0133333 hPa (21.11 °C) Calculated Vapor Pressure
Relative vapour density	: No data available
Relative density	: No data available
Density	: 0.880 g/cm ³ (15.56 °C)
Solubility(ies)	
Water solubility	: insoluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Thermal decomposition	: No data available
Viscosity	
Viscosity, dynamic	: No data available
Viscosity, kinematic	: 115 mm ² /s (40 °C)

		Page: 6
SAFETY DATA SHEET		Revision Date: 01/12/2017
		Print Date: 5/22/2017
		SDS Number: R0306034
Premium Blue™ Heavy Duty Diesel SAE 15W-40 Engine Oil		Version: 1.6
VV70509		

Oxidizing properties : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Product will not undergo hazardous polymerization.

Conditions to avoid : excessive heat

Incompatible materials : Strong oxidizing agents

Hazardous decomposition products : carbon dioxide and carbon monoxide
Hydrocarbons
hydrogen sulfide
Nitrogen oxides (NO_x)
Sulphur oxides
zinc oxide fumes
mercaptans

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation
Skin contact
Eye Contact
Ingestion

Acute toxicity

Not classified based on available information.

Components:

Distillates (petroleum), solvent-dewaxed heavy paraffinic:


Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

ZINC BIS[O-(6-METHYLHEPTYL)]BIS[O-SEC-BUTYL]BIS(DITHIOPHOSPHATE):

Acute oral toxicity : LD50 (Rat): 2,600 mg/kg

Acute dermal toxicity : LD50 (Rabbit): > 3,160 mg/kg
Method: OECD Test Guideline 402
Assessment: Not classified as acutely toxic by dermal absorption under GHS.

		Page: 7
SAFETY DATA SHEET		Revision Date: 01/12/2017
		Print Date: 5/22/2017
		SDS Number: R0306034
Premium Blue™ Heavy Duty Diesel SAE 15W-40 Engine Oil		Version: 1.6
VV70509		

Skin corrosion/irritation

Not classified based on available information.

Components:

Distillates (petroleum), solvent-dewaxed heavy paraffinic:
Result: Slight, transient irritation

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

Result: Slight, transient irritation

ZINC BIS[O-(6-METHYLHEPTYL)]BIS[O-SEC-BUTYL]BIS(DITHIOPHOSPHATE):

Species: Guinea pig

Method: OECD Test Guideline 404

Result: Irritating to skin.

Remarks: Information given is based on data obtained from similar substances.

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks: Unlikely to cause eye irritation or injury.

Components:

Distillates (petroleum), solvent-dewaxed heavy paraffinic:
Result: Slight, transient irritation

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

Result: Slight, transient irritation

ZINC BIS[O-(6-METHYLHEPTYL)]BIS[O-SEC-BUTYL]BIS(DITHIOPHOSPHATE):

Species: Rabbit

Result: Corrosive

Remarks: Information given is based on data obtained from similar substances.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Components:

Distillates (petroleum), solvent-dewaxed heavy paraffinic:
Test Type: Buehler Test
Species: Guinea pig
Assessment: Does not cause skin sensitisation.

Germ cell mutagenicity

Not classified based on available information.

Components:

ZINC BIS[O-(6-METHYLHEPTYL)]BIS[O-SEC-BUTYL]BIS(DITHIOPHOSPHATE):

Genotoxicity in vitro

: Test Type: Ames test


Test species: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Remarks: Information given is based on data obtained from similar substances.

		Page: 8
SAFETY DATA SHEET		Revision Date: 01/12/2017
		Print Date: 5/22/2017
		SDS Number: R0306034
Premium Blue™ Heavy Duty Diesel SAE 15W-40 Engine Oil		Version: 1.6
VV70509		

Genotoxicity in vivo : Test Type: Micronucleus test
 Test species: Mouse
 Method: OECD Test Guideline 474
 Result: negative
 Remarks: Information given is based on data obtained from similar substances.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Product:

No aspiration toxicity classification

Components:

Distillates (petroleum), solvent-dewaxed heavy paraffinic:

No aspiration toxicity classification

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

May be fatal if swallowed and enters airways.

Further information

Product:

Remarks: No data available

Carcinogenicity:

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 12. ECOLOGICAL INFORMATION


Ecotoxicity

Product:

Ecotoxicology Assessment

Acute aquatic toxicity

: Not classified based on available information.

		Page: 9
SAFETY DATA SHEET		Revision Date: 01/12/2017
		Print Date: 5/22/2017
		SDS Number: R0306034
Premium Blue™ Heavy Duty Diesel SAE 15W-40 Engine Oil		Version: 1.6
VV70509		

Chronic aquatic toxicity : Not classified based on available information.

Components:

Distillates (petroleum), solvent-dewaxed heavy paraffinic:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l
 Exposure time: 96 h
 Test Type: static test
 Test substance: WAF

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): > 10,000 mg/l
 Exposure time: 48 h
 Test Type: static test
 Test substance: WAF

Toxicity to algae : NOEL (Pseudokirchneriella subcapitata (algae)): >= 100 mg/l
 End point: Growth inhibition
 Exposure time: 72 h
 Test Type: static test
 Test substance: WAF

ZINC BIS[O-(6-METHYLHELPTYL)]BIS[O-SEC-BUTYL]BIS(DITHIOPHOSPATE):

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): 4.5 mg/l
 Exposure time: 96 h
 Test Type: semi-static test

Toxicity to daphnia and other aquatic invertebrates : EC50 (Water flea (Daphnia magna)): 5.4 mg/l
 Exposure time: 48 h
 Test Type: static test

Toxicity to algae : EC50 (Selenastrum capricornutum (green algae)): 2.1 mg/l
 End point: Growth inhibition
 Exposure time: 72 h
 Test Type: static test

Persistence and degradability

Components:

Distillates (petroleum), solvent-dewaxed heavy paraffinic:

Biodegradability : Result: Inherently biodegradable.
 Method: OECD Test Guideline 301F

ZINC BIS[O-(6-METHYLHELPTYL)]BIS[O-SEC-BUTYL]BIS(DITHIOPHOSPATE):

Biodegradability : Result: Not readily biodegradable.
 Biodegradation: 1.5 %
 Exposure time: 28 d
 Method: OECD Test Guideline 301B


No data available

Bioaccumulative potential

Components:

ZINC BIS[O-(6-METHYLHELPTYL)]BIS[O-SEC-BUTYL]BIS(DITHIOPHOSPATE):

Partition coefficient: n-octanol/water : log Pow: 0.59 - 1.2 (23 °C)

		Page: 10
SAFETY DATA SHEET		Revision Date: 01/12/2017
		Print Date: 5/22/2017
		SDS Number: R0306034
Premium Blue™ Heavy Duty Diesel SAE 15W-40 Engine Oil		Version: 1.6
VV70509		

No data available

Mobility in soil

Components:

No data available

Other adverse effects

No data available

Product:

Additional ecological information : No data available

Components:

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

General advice : Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.

SECTION 14. TRANSPORT INFORMATION

International transport regulations

REGULATION

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.

U.S. DOT - ROAD

Not dangerous goods

CFR_RAIL_C

Not dangerous goods

U.S. DOT - INLAND WATERWAYS

Not dangerous goods


TDG_ROAD_C

Not dangerous goods

TDG_RAIL_C

Not dangerous goods

TDG_INWT_C

		Page: 11
SAFETY DATA SHEET		Revision Date: 01/12/2017
		Print Date: 5/22/2017
		SDS Number: R0306034
Premium Blue™ Heavy Duty Diesel SAE 15W-40 Engine Oil		Version: 1.6
VV70509		

Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods

MX_DG

Not dangerous goods

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	no
------------------	----

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.

SECTION 15. REGULATORY INFORMATION

**EPCRA - Emergency Planning and Community Right-to-Know Act
CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
ETHYLENEDIAMINE	107-15-3	5000	*

*: Calculated RQ exceeds reasonably attainable upper limit.


SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
ETHYLENEDIAMINE	107-15-3	5000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 311/312 Hazards : No SARA Hazards

SARA 313

		Page: 12
SAFETY DATA SHEET		Revision Date: 01/12/2017
		Print Date: 5/22/2017
		SDS Number: R0306034
Premium Blue™ Heavy Duty Diesel SAE 15W-40 Engine Oil		Version: 1.6
VV70509		

ZINC BIS[O-(6-METHYLHELPTYL)]BIS[O-SEC-BUTYL]BIS(DITHIOPHOS PATE) 93819-94-4 1.03 %

California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

- DSL : All components of this product are on the Canadian DSL
- AICS : Not in compliance with the inventory
- ENCS : On the inventory, or in compliance with the inventory
- KECI : Not in compliance with the inventory
- PICCS : On the inventory, or in compliance with the inventory
- IECSC : Not in compliance with the inventory
- TSCA : On TSCA Inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information

Revision Date: 01/12/2017

NFPA:	HMIS III:
--------------	------------------

SAFETY DATA SHEET

Revision Date: 01/12/2017

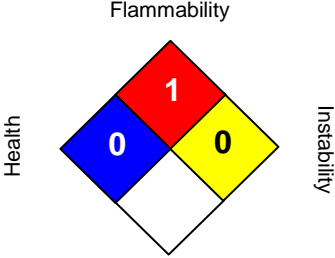
Print Date: 5/22/2017

SDS Number: R0306034

Premium Blue™ Heavy Duty Diesel SAE 15W-40 Engine Oil

Version: 1.6

VV70509

 <p style="text-align: center;">Special hazard.</p>	<table border="1"> <tr> <td style="background-color: blue; color: white;">HEALTH</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="background-color: red; color: white;">FLAMMABILITY</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="background-color: yellow;">PHYSICAL HAZARD</td> <td style="text-align: center;">0</td> </tr> </table> <p>0 = not significant, 1 = Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic</p>	HEALTH	0	FLAMMABILITY	1	PHYSICAL HAZARD	0
HEALTH	0						
FLAMMABILITY	1						
PHYSICAL HAZARD	0						

NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

Full text of H-Statements

H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H318	Causes serious eye damage.

Sources of key data used to compile the Safety Data Sheet

Valvoline internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

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 SDS has been prepared by Valvoline's Environmental Health and Safety Department (1-800-VALVOLINE).

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists

BEI : Biological Exposure Index

CAS : Chemical Abstracts Service (Division of the American Chemical Society).

CMR : Carcinogenic, Mutagenic or Toxic for Reproduction

FG : Food grade


GHS : Globally Harmonized System of Classification and Labeling of Chemicals.

H-statement : Hazard Statement

IATA : International Air Transport Association.

IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO : International Civil Aviation Organization

		Page: 14
SAFETY DATA SHEET		Revision Date: 01/12/2017
		Print Date: 5/22/2017
		SDS Number: R0306034
Premium Blue™ Heavy Duty Diesel SAE 15W-40 Engine Oil		Version: 1.6
VV70509		

ICAO-TI (ICAO) : Technical Instructions by the “International Civil Aviation Organization”

IMDG : International Maritime Code for Dangerous Goods

ISO : International Organization for Standardization

logPow : octanol-water partition coefficient

LCxx : Lethal Concentration, for xx percent of test population

LDxx : Lethal Dose, for xx percent of test population.

ICxx : Inhibitory Concentration for xx of a substance

Ecxx : Effective Concentration of xx

N.O.S.: Not Otherwise Specified

OECD : Organization for Economic Co-operation and Development

OEL : Occupational Exposure Limit

P-Statement : Precautionary Statement

PBT : Persistent , Bioaccumulative and Toxic

PPE : Personal Protective Equipment

STEL : Short-term exposure limit

STOT : Specific Target Organ Toxicity

TLV : Threshold Limit Value

TWA : Time-weighted average

vPvB : Very Persistent and Very Bioaccumulative

WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act

DOT : Department of Transportation

FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act

HMIRC : Hazardous Materials Information Review Commission

HMIS : Hazardous Materials Identification System

NFPA : National Fire Protection Association

NIOSH : National Institute for Occupational Safety and Health

OSHA : Occupational Safety and Health Administration

PMRA : Health Canada Pest Management Regulatory Agency

RTK : Right to Know

WHMIS : Workplace Hazardous Materials Information System