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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 SDS@valvoline.com	Emergency telephone number +1-800-VALVOLINE (+1-800-825-8654) Regulatory Information Number 1-800-TEAMVAL Product Information 1-800-TEAMVAL
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SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Other hazards which do not result in classification

No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Classification	Concentration (%)
PETROLEUM DISTILLATES	64742-65-0	Not a hazardous substance or mixture.	>= 1.00 - < 10.00
Reaction products of Benzeneamine, N-phenyl- with nonene (branched)	36878-20-3	3; H316 Aquatic Chronic 4; H413	>= 1.00 - < 10.00

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ORGANIC ACID ESTER	125643-61-0	Aquatic Chronic 4; H413	>= 1.00 - < 10.00
PETROLEUM DISTILLATES	64742-55-8	Asp. Tox. 1; H304	>= 1.00 - < 10.00
ZINC DIALKYLDITHIOPHOSPHATE	93819-94-4	Acute Tox. 5; H303 2; H315 1; H318 Aquatic Acute 2; H401 Aquatic Chronic 2; H411	>= 1.00 - < 10.00
LONG CHAIN ALKYL THIOCARBAMIDE METAL COMPLEX		Acute Tox. 5; H303 2; H315 Skin Sens. 1B; H317 Aquatic Acute 3; H402 Aquatic Chronic 3; H412	>= 0.10 - < 1.00
C14-16-18 Alkyl phenol		Skin Sens. 1B; H317 STOT RE 2; H373	>= 0.10 - < 1.00

SECTION 4. FIRST AID MEASURES

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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. 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. 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.

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 (CO ₂) Dry chemical
Specific hazards during	: Do not allow run-off from fire fighting to enter drains or water

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firefighting

courses.

Hazardous combustion products

: carbon dioxide and carbon monoxide
Hydrocarbons
nitrogen oxides (NOx)
zinc oxide
Sulphur oxides
hydrogen sulfide
mercaptans

Specific extinguishing methods

: Product is compatible with standard fire-fighting agents.

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.
Comply with all applicable federal, state, and local regulations.

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.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion

: Normal measures for preventive fire protection.

Advice on safe handling

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

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
PETROLEUM DISTILLATES	64742-65-0	CMP (Mist)	5 mg/m3	AR OEL


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			Mist	
		CMP - CPT (Mist)	10 mg/m3 Mist	AR OEL
		TWA (Mist)	5 mg/m3 Mist	PE OEL
		STEL (Mist)	10 mg/m3 Mist	PE OEL
		CAP (Mist)	5 mg/m3 Mist	VE OEL
		LEB (Mist)	10 mg/m3 Mist	VE OEL
		CPT (Mist)	5 mg/m3 Mist	PA OEL
		CCT (Mist)	10 mg/m3 Mist	PA OEL
		TWA (Mist, inhalable)	5 mg/m3 Mist, inhalable	CR OEL
		STEL (Mist)	10 mg/m3 Mist	CR OEL
PETROLEUM DISTILLATES	64742-55-8	CMP (Mist)	5 mg/m3 Mist	AR OEL
		CMP - CPT (Mist)	10 mg/m3 Mist	AR OEL
		TWA (Mist)	5 mg/m3 Mist	PE OEL
		STEL (Mist)	10 mg/m3 Mist	PE OEL
		CAP (Mist)	5 mg/m3 Mist	VE OEL
		LEB (Mist)	10 mg/m3 Mist	VE OEL
		CPT (Mist)	5 mg/m3 Mist	PA OEL
		CCT (Mist)	10 mg/m3 Mist	PA OEL
		TWA (Mist, inhalable)	5 mg/m3 Mist, inhalable	CR OEL
		STEL (Mist)	10 mg/m3 Mist	CR OEL


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.

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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 as appropriate:
Safety shoes

Hygiene measures : General industrial hygiene practice.

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 : > 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/cm³ (15.56 °C)

Solubility(ies)

Water solubility : insoluble

Solubility in other solvents : No data available

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Partition coefficient: n-octanol/water : No data available

Thermal decomposition : No data available

Viscosity
Viscosity, dynamic : No data available

Viscosity, kinematic : 115 mm²/s (40 °C)

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

Acute toxicity

Not classified based on available information.

Components:

PETROLEUM DISTILLATES:


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

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

Reaction products of Benzeneamine, N-phenyl- with nonene (branched):

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

Acute dermal toxicity : LD₅₀ (Rat): > 2,000 mg/kg

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Assessment: Not classified as acutely toxic by dermal absorption under GHS.
Remarks: Information given is based on data obtained from similar substances.

ORGANIC ACID ESTER:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 401
GLP: yes
Assessment: No adverse effect has been observed in acute oral toxicity tests.

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes
Assessment: No adverse effect has been observed in acute dermal toxicity tests.

ZINC DIALKYL 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.

LONG CHAIN ALKYL THIOCARBAMIDE METAL COMPLEX:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Assessment: No adverse effect has been observed in acute dermal toxicity tests.

C14-16-18 Alkyl phenol:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
Assessment: Not classified as acutely toxic by ingestion under GHS.

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Assessment: Not classified as acutely toxic by dermal absorption under GHS.
Remarks: No mortality observed at this dose.


Skin corrosion/irritation

Not classified based on available information.

Components:

PETROLEUM DISTILLATES:

Result: Slight, transient irritation

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Reaction products of Benzeneamine, N-phenyl- with nonene (branched):

Species: Rabbit

Result: Mild skin irritation

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

ORGANIC ACID ESTER:

Species: Rabbit

Method: OECD Test Guideline 404

Result: No skin irritation

GLP: yes

PETROLEUM DISTILLATES:

Result: Slight, transient irritation

ZINC DIALKYLDITHIOPHOSPHATE:

Species: Guinea pig

Method: OECD Test Guideline 404

Result: Irritating to skin.

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

LONG CHAIN ALKYL THIOCARBAMIDE METAL COMPLEX:

Species: Rabbit

Result: Irritating to skin.

C14-16-18 Alkyl phenol:

Method: OECD Test Guideline 431

Result: No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks: Unlikely to cause eye irritation or injury.

Components:

PETROLEUM DISTILLATES:

Result: Slight, transient irritation

Reaction products of Benzeneamine, N-phenyl- with nonene (branched):

Species: Rabbit


Result: Slight, transient irritation

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

ORGANIC ACID ESTER:

Species: Rabbit

Result: No eye irritation

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Method: **OECD Test Guideline 405**

GLP: **yes**

PETROLEUM DISTILLATES:

Result: **Slight, transient irritation**

ZINC DIALKYLDITHIOPHOSPHATE:

Species: **Rabbit**

Result: **Corrosive**

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

LONG CHAIN ALKYL THIOCARBAMIDE METAL COMPLEX:

Species: **Rabbit**

Result: **Slight, transient irritation**

C14-16-18 Alkyl phenol:

Species: **Rabbit**

Result: **Slight, transient irritation**

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Components:

PETROLEUM DISTILLATES:

Test Type: **Buehler Test**

Species: **Guinea pig**

Assessment: **Does not cause skin sensitisation.**

Reaction products of Benzeneamine, N-phenyl- with nonene (branched):

Species: **Guinea pig**

Assessment: **Does not cause skin sensitisation.**

Method: **OECD Test Guideline 406**

ORGANIC ACID ESTER:

Test Type: **Maximisation Test**

Species: **Guinea pig**

Method: **OECD Test Guideline 406**

Result: **Does not cause skin sensitisation.**


GLP: **yes**

LONG CHAIN ALKYL THIOCARBAMIDE METAL COMPLEX:

Test Type: **Maximisation Test**

Species: **Guinea pig**

Assessment: **The product is a skin sensitiser, sub-category 1B.**

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C14-16-18 Alkyl phenol:

Test Type: Local lymph node assay
Species: Mouse
Assessment: The product is a skin sensitizer, sub-category 1B.
Method: OECD Test Guideline 429

Germ cell mutagenicity

Not classified based on available information.

Components:

Reaction products of Benzeneamine, N-phenyl- with nonene (branched):

Genotoxicity in vitro : Test Type: Ames test
Test species: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Result: negative

ORGANIC ACID ESTER:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative
GLP: yes


: Test Type: Ames test
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: yes

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Test species: Chinese hamster
Method: OECD Test Guideline 474
Result: negative
GLP: yes

ZINC DIALKYLDITHIOPHOSPHATE:

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.

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.

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LONG CHAIN ALKYL THIOCARBAMIDE METAL COMPLEX:

Genotoxicity in vitro : Test Type: **Ames test**
 Test species: **Salmonella typhimurium**
 Metabolic activation: **with and without metabolic activation**
 Result: **negative**

C14-16-18 Alkyl phenol:

Genotoxicity in vitro : Test Type: **Ames test**
 Test species: **Salmonella typhimurium**
 Metabolic activation: **with and without metabolic activation**
 Result: **negative**

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

Components:

ORGANIC ACID ESTER:

Effects on fertility : Species: **Mouse**
 Application Route: **Oral**
 Method: **OECD Test Guideline 415**
 Result: **Animal testing did not show any effects on fertility.**
 GLP: **yes**

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Components:

C14-16-18 Alkyl phenol:

Target Organs: **Liver**
 Assessment: **The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.**

Repeated dose toxicity

Components:

ORGANIC ACID ESTER:

Species: **Rat, male and female**
 NOAEL: **5 mg/kg**
 Application Route: **Oral**
 Method: **OECD Test Guideline 407**
 GLP: **yes**

Aspiration toxicity

Not classified based on available information.


Product:

No aspiration toxicity classification

Components:

PETROLEUM DISTILLATES:

No aspiration toxicity classification

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PETROLEUM DISTILLATES:

May be fatal if swallowed and enters airways.

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

PETROLEUM DISTILLATES:

Toxicity to fish	: LC50 (<i>Pimephales promelas</i> (fathead minnow)): > 100 mg/l Exposure time: 96 h Test Type: static test Test substance: WAF
Toxicity to daphnia and other aquatic invertebrates	: EL50 (<i>Daphnia magna</i> (Water flea)): > 10,000 mg/l Exposure time: 48 h Test Type: static test Test substance: WAF
Toxicity to algae	: NOEL (<i>Pseudokirchneriella subcapitata</i> (algae)): >= 100 mg/l End point: Growth inhibition Exposure time: 72 h Test Type: static test Test substance: WAF

Reaction products of Benzeneamine, N-phenyl- with nonene (branched):

Toxicity to fish	: LC50 (<i>Danio rerio</i> (zebra fish)): > 100 mg/l Exposure time: 96 h Test Type: static test Remarks: Information given is based on data obtained from similar substances.
Toxicity to daphnia and other aquatic invertebrates	: EC50 (<i>Daphnia magna</i> (Water flea)): > 100 mg/l Exposure time: 48 h Test Type: static test Test substance: WAF
Toxicity to algae	: EC50 (<i>Pseudokirchneriella subcapitata</i> (algae)): 600 mg/l End point: Growth inhibition Exposure time: 72 h Test Type: static test

ORGANIC ACID ESTER:

Toxicity to fish	: LC50 (<i>Danio rerio</i> (zebra fish)): > 100 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203
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Toxicity to daphnia and other aquatic invertebrates : **EC50 (Daphnia magna (Water flea)): > 100 mg/l**
Exposure time: **48 h**
Test Type: **static test**
Test substance: **WAF**
Method: **OECD Test Guideline 202**
GLP: **yes**

Toxicity to algae : **EC50 (Desmodesmus subspicatus (Scenedesmus subspicatus)): > 3 mg/l**
Exposure time: **72 h**
Test Type: **static test**
Method: **OECD Test Guideline 201**
GLP: **yes**
Remarks: **No toxicity at the limit of solubility**

NOEC (Desmodesmus subspicatus (Scenedesmus subspicatus)): >= 3 mg/l
Exposure time: **72 h**
Test Type: **static test**
Method: **OECD Test Guideline 201**
GLP: **yes**
Remarks: **No toxicity at the limit of solubility**

Toxicity to fish (Chronic toxicity) : **NOEC (Danio rerio (zebra fish)): 0.001 mg/l**
Exposure time: **36 d**
Test Type: **flow-through test**
Test substance: **WAF**
Method: **OECD Test Guideline 210**
GLP: **yes**

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : **NOEC (Daphnia magna (Water flea)): ca. 0.01 mg/l**
Exposure time: **21 d**
Test Type: **semi-static test**
Method: **OECD Test Guideline 211**
GLP: **yes**
Remarks: **No toxicity at the limit of solubility**

Toxicity to bacteria : **EC50 (activated sludge): > 100 mg/l**
Exposure time: **3 h**
Test Type: **Static**
Method: **OECD Test Guideline 209**
GLP: **yes**

Ecotoxicology Assessment

Chronic aquatic toxicity : **May cause long lasting harmful effects to aquatic life.**

ZINC DIALKYLDITHIOPHOSPHATE:

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 : **EC50 (Water flea (Daphnia magna)): 5.4 mg/l**

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aquatic invertebrates 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

LONG CHAIN ALKYL THIOCARBAMIDE METAL COMPLEX:

Toxicity to fish : LC50 (*Oncorhynchus mykiss* (rainbow trout)): 94.8 mg/l
Exposure time: 96 h
Test Type: semi-static test
Test substance: WAF
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EL50 (*Daphnia magna* (Water flea)): 50 mg/l
Exposure time: 48 h
Test Type: static test
Test substance: WAF
Method: OECD Test Guideline 202

Toxicity to algae : NOELR (*Pseudokirchneriella subcapitata* (green algae)): 4.05 mg/l
End point: Growth inhibition
Exposure time: 72 h
Test Type: static test
Test substance: WAF
Method: OECD Test Guideline 201
Remarks: Information given is based on data obtained from similar substances.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOELR (*Daphnia magna* (Water flea)): 100 mg/l
Exposure time: 21 d
Test Type: semi-static test
Test substance: WAF
Method: OECD Test Guideline 211

C14-16-18 Alkyl phenol:

Toxicity to fish : LC50 (*Cyprinus carpio* (Carp)): > 100 mg/l
Exposure time: 96 h
Test Type: static test
Test substance: WAF

Toxicity to daphnia and other aquatic invertebrates : EC50 (*Daphnia magna* (Water flea)): > 100 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202

Toxicity to algae : EC50 (*Pseudokirchneriella subcapitata* (algae)): > 100 mg/l
End point: Growth inhibition
Exposure time: 72 h
Test Type: static test
Test substance: WAF

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No data available

Persistence and degradability

Components:

PETROLEUM DISTILLATES:

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

Reaction products of Benzeneamine, N-phenyl- with nonene (branched):

Biodegradability : Result: **Not readily biodegradable.**
Biodegradation: **0 %**
Exposure time: **28 d**
Method: **OECD Test Guideline 301B**

ORGANIC ACID ESTER:

Biodegradability : Result: **Not readily biodegradable.**
Biodegradation: **< 4 %**
Exposure time: **28 d**
Method: **OECD Test Guideline 301B**
GLP: **yes**

ZINC DIALKYL DITHIOPHOSPHATE:

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

LONG CHAIN ALKYL THIOCARBAMIDE METAL COMPLEX:

Biodegradability : Result: **Not readily biodegradable.**
Biodegradation: **23 %**
Exposure time: **28 d**
Method: **OECD Test Guideline 301B**
Remarks: **Information given is based on data obtained from similar substances.**

C14-16-18 Alkyl phenol:

Biodegradability : Result: **Readily biodegradable.**
Remarks: **Expert judgement**

No data available

Bioaccumulative potential

Components:

Reaction products of Benzeneamine, N-phenyl- with nonene (branched):

Partition coefficient: n-octanol/water : log Pow: **> 7.5**

ORGANIC ACID ESTER:

Bioaccumulation : Species: **Fish**
Bioconcentration factor (BCF): **260**
Method: **OECD Test Guideline 305**
Remarks: **The substance has low potential for bioaccumulation.**

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Partition coefficient: n-octanol/water : log Pow: **Calculated 9.2****ZINC DIALKYLDITHIOPHOSPHATE:**Partition coefficient: n-octanol/water : log Pow: **0.59 - 1.2 (23 °C)****LONG CHAIN ALKYL THIOCARBAMIDE METAL COMPLEX:**Partition coefficient: n-octanol/water : log Pow: **> 5.1**
Method: **OECD Test Guideline 107****C14-16-18 Alkyl phenol:**Partition coefficient: n-octanol/water : log Pow: **> 7.2**

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**

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.


INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS

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Not dangerous goods

UN_DG

Not dangerous goods

***ORM = ORM-D, CBL = COMBUSTIBLE LIQUID**

Marine pollutant	no
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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

Safety, health and environmental regulations/legislation specific for the substance or mixture

Chemical Control Order (CCO)	: Not applicable
Priority Chemical List (PCL)	: Not applicable
Hazardous Substance Act B.E. 2535	: Not applicable
Emergency Decree on Controlling the Use of Volatile Substances B.E. 2533	: Not applicable


Other international regulations

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)

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SECTION 16. OTHER INFORMATION

Further information

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Full text of H-Statements

H303	May be harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H316	Causes mild skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H373	May cause damage to organs through prolonged or repeated exposure.
H401	Toxic to aquatic life.
H402	Harmful to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

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

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.

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.

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

ICAO : International Civil Aviation Organization

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

CEATOX

Assistance Center of the Institute of Toxicology

Children's Hospital Clinic, Faculty of Medicine

University of São Paulo.

BR OEL : Occupational Exposure Limit (Brazil)

UY OEL : Occupational Exposure Limit (Uruguay)

PY OEL : Occupational Exposure Limit (Paraguay)