



## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006  
Valvoline™ HD AXLE OIL PRO 80W90 LS Gear  
Oil

Version: 8.0

Revision Date: 22.02.2023

Print Date: 30/06/2023

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Trade name : Valvoline™ HD AXLE OIL PRO 80W90 LS  
Gear Oil

Product code : 868209

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

Use of the substance/mixture : Lubricating oils

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

Company : Ellis Enterprises B.V., an affiliate of Valvoline  
Wieldrechtseweg 39  
3316 BG Dordrecht  
Netherlands

Telephone : +31 (0)78 654 3500 (in the Netherlands), or contact your local  
CSR contact person

E-mail address of person : SDS@valvoline.com  
responsible for the SDS

#### 1.4 Emergency telephone number

00-800-825-8654 / 001-859-202-3865, or contact your local emergency telephone number  
at 112

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### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI  
2019/720, and UK SI 2020/1567)

Not a hazardous substance or mixture.



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### 2.2 Label elements

**Labelling (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)**

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required

#### Additional Labelling

EUH210 Safety data sheet available on request.

EUH208 Contains Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl, Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs..

May produce an allergic reaction.

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

#### Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
LUBRICATING OILS, PETROLEUM, C20-50, HYDROTREATED	72623-87-1 276-738-4 649-483-00-5 01-2119474889-13-xxxx	Asp. Tox. 1; H304	>= 5 - < 10
Distillates (Petroleum), Hydrotreated Heavy Paraffinic	64742-54-7 265-157-1 649-467-00-8 01-2119484627-25-xxxx	Asp. Tox. 1; H304	>= 1 - < 2.5
Reaction Products of alcohols, C14-18, C18 unsat., esterified with phosphorus pentoxide and salted with amines, C12-14,-tert-alkyl	Not Assigned 01-2119978530-33-xxxx	Aquatic Chronic 3; H412	>= 1 - < 2.5



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DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC	64742-65-0 265-169-7 649-474-00-6 01-2119471299-27- xxxx	Asp. Tox. 1; H304	>= 1 - < 2.5
Distillates (petroleum), solvent- dewaxed light paraffinic	64742-56-9 265-159-2 649-469-00-9	Asp. Tox. 1; H304	>= 1 - < 2.5
Reaction products of 4-methyl-2- pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl	Not Assigned 931-384-6 01-2119493620-38- xxxx	Acute Tox. 4; H302 Eye Dam. 1; H318 Skin Sens. 1B; H317 Aquatic Chronic 2; H411  specific concentration limit Eye Dam. 1 > 50 - 100 % Skin Sens. 1 >= 9.39 %	>= 1 - < 2.5
Reaction product of 1,3,4- thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.	1471311-26-8  01-2119971727-23- xxxx	Flam. Liq. 3; H226 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1B; H317 Aquatic Chronic 3; H412	>= 0.1 - < 0.25

For explanation of abbreviations see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- General advice : Do not leave the victim unattended.
- If inhaled : If unconscious, place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of eye contact : Remove contact lenses.  
Protect unharmed eye.  
If eye irritation persists, consult a specialist.



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If swallowed : Keep respiratory tract clear.  
Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.

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

Symptoms : No symptoms known or expected.

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

Treatment : No hazards which require special first aid measures.  
  
Treat symptomatically.

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### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media : High volume water jet

#### 5.2 Special hazards arising from the substance or mixture

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

#### 5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.



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### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Refer to protective measures listed in sections 7 and 8.  
Use personal protective equipment.

#### 6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.  
If the product contaminates rivers and lakes or drains inform  
respective authorities.

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

Methods for cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).  
Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

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### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

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

Advice on protection against : Normal measures for preventive fire protection.  
fire and explosion

Hygiene measures : General industrial hygiene practice.

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

Requirements for storage : Containers which are opened must be carefully resealed and  
areas and containers kept upright to prevent leakage. Electrical installations /  
working materials must comply with the technological safety  
standards.

Advice on common storage : No materials to be especially mentioned.

Further information on : No decomposition if stored and applied as directed.  
storage stability



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### 7.3 Specific end use(s)

Specific use(s) : No data available

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### Personal protective equipment

Eye/face protection : Safety glasses

#### Hand protection

Material : neoprene, nitrile rubber  
Break through time :  $\geq 240$  min  
Glove thickness :  $\geq 0.35$  mm  
Directive : Equipment should conform to EN 374

Remarks : The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The data about break through time/strength of material are standard values! The exact break through time/strength of material has to be obtained from the producer of the protective glove.

Skin and body protection : Protective suit

Respiratory protection : No personal respiratory protective equipment normally required.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance : liquid



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Colour	: amber
Odour	: oily
Odour Threshold	: No data available
pH	: Not applicable
Pour point	: < -24 °C
Boiling point/boiling range	: No data available
Flash point	: 214 °C Method: Cleveland open cup
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit / Upper flammability limit	: No data available
Lower explosion limit / Lower flammability limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative density	: No data available
Density	: ca. 0.889 g/cm <sup>3</sup> (15 °C)
Solubility(ies)	
Water solubility	: insoluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Decomposition temperature	: No data available
Viscosity	
Viscosity, dynamic	: No data available
Viscosity, kinematic	: ca. 125 mm <sup>2</sup> /s (40 °C)



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Oxidizing properties : No data available

## 9.2 Other information

Self-ignition : No data available

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No decomposition if stored and applied as directed.

### 10.2 Chemical stability

No decomposition if stored and applied as directed.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under recommended storage conditions.  
No hazards to be specially mentioned.

### 10.4 Conditions to avoid

Conditions to avoid : None known.

### 10.5 Incompatible materials

Materials to avoid : Strong oxidizing agents

### 10.6 Hazardous decomposition products

No hazardous decomposition products are known.

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Not classified based on available information.

#### Product:

Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg  
Method: Calculation method

#### Components:

LUBRICATING OILS, PETROLEUM, C20-50, HYDROTREATED:



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Acute oral toxicity	: LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity	: LC50 (Rat): > 5.58 mg/l Exposure time: 4 h Test atmosphere: dust/mist Assessment: The substance or mixture has no acute inhalation toxicity Remarks: No mortality observed at this dose.
Acute dermal toxicity	: LD50 (Rabbit): > 5,000 mg/kg Remarks: No mortality observed at this dose.

### Distillates (Petroleum), Hydrotreated Heavy Paraffinic:

Acute oral toxicity	: LD50 (Rat): > 15 g/kg
Acute dermal toxicity	: LD50 (Rabbit): > 5 g/kg

### DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC:

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

### Distillates (petroleum), solvent-dewaxed light paraffinic:

Acute oral toxicity	: LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity	: LC50 (Rat): > 5.53 mg/l Exposure time: 4 h Test atmosphere: dust/mist Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity	: LD50 (Rabbit): > 5,000 mg/kg

Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentoxide, and salted by amines, C12-14-tert-alkyl:

Acute oral toxicity	: LD50 (Rat): ca. 2,000 mg/kg Method: OECD Test Guideline 401 Assessment: The component/mixture is moderately toxic after single ingestion.
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### Skin corrosion/irritation

Not classified based on available information.



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### Components:

#### LUBRICATING OILS, PETROLEUM, C20-50, HYDROTREATED:

Species	:	Rabbit
Result	:	No skin irritation

#### Distillates (Petroleum), Hydrotreated Heavy Paraffinic:

Assessment	:	Slight, transient irritation
Result	:	Slight, transient irritation

#### Reaction Products of alcohols, C14-18, C18 unsat., esterified with phosphorus pentoxide and salted with amines, C12-14,-tert-alkyl:

Result	:	No skin irritation
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#### DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC:

Assessment	:	Slight, transient irritation
Result	:	Slight, transient irritation

#### Distillates (petroleum), solvent-dewaxed light paraffinic:

Species	:	Rabbit
Result	:	Slight, transient irritation

#### Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.:

Result	:	Irritating to skin.
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#### Serious eye damage/eye irritation

Not classified based on available information.

### Product:

Result	:	No eye irritation
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### Components:

#### LUBRICATING OILS, PETROLEUM, C20-50, HYDROTREATED:

Species	:	Rabbit
Result	:	No eye irritation

#### Distillates (Petroleum), Hydrotreated Heavy Paraffinic:

Assessment	:	No eye irritation
Result	:	No eye irritation



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**Reaction Products of alcohols, C14-18, C18 unsat., esterified with phosphorus pentoxide and salted with amines, C12-14,-tert-alkyl:**

Result : No eye irritation

**DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC:**

Assessment : Slight, transient irritation  
Result : Slight, transient irritation

**Distillates (petroleum), solvent-dewaxed light paraffinic:**

Species : Rabbit  
Result : Slight, transient irritation

Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentoxide, and salted by amines, C12-14-tert-alkyl:

Result : Corrosive

**Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.:**

Result : Risk of serious damage to eyes.

**Respiratory or skin sensitisation**

**Skin sensitisation**

Not classified based on available information.

**Respiratory sensitisation**

Not classified based on available information.

**Product:**

Assessment : Does not cause skin sensitisation.

**Components:**

**LUBRICATING OILS, PETROLEUM, C20-50, HYDROTREATED:**

Test Type : Buehler Test  
Species : Guinea pig  
Assessment : Does not cause skin sensitisation.

**Distillates (petroleum), solvent-dewaxed light paraffinic:**

Test Type : Buehler Test  
Species : Guinea pig  
Assessment : Does not cause skin sensitisation.  
Method : OECD Test Guideline 406



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Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl:

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

Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.:

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

### Germ cell mutagenicity

Not classified based on available information.

### Carcinogenicity

Not classified based on available information.

### Components:

#### LUBRICATING OILS, PETROLEUM, C20-50, HYDROTREATED:

Carcinogenicity - Assessment : Classified based on DMSO extract content < 3% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note L)

#### Distillates (Petroleum), Hydrotreated Heavy Paraffinic:

Carcinogenicity - Assessment : Classified based on DMSO extract content < 3% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note L)

#### DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC:

Carcinogenicity - Assessment : Classified based on DMSO extract content < 3% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note L)

#### Distillates (petroleum), solvent-dewaxed light paraffinic:

Carcinogenicity - Assessment : Classified based on DMSO extract content < 3% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note L)

### 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.



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### Components:

#### LUBRICATING OILS, PETROLEUM, C20-50, HYDROTREATED:

|| May be fatal if swallowed and enters airways.

#### Distillates (Petroleum), Hydrotreated Heavy Paraffinic:

|| May be fatal if swallowed and enters airways.

#### DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC:

|| May be fatal if swallowed and enters airways.

#### Distillates (petroleum), solvent-dewaxed light paraffinic:

|| The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

### Further information

#### Product:

Remarks : No data available

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Product:

#### Ecotoxicology Assessment

Acute aquatic toxicity :

Toxic to aquatic life.

Chronic aquatic toxicity :

This product has no known ecotoxicological effects.

Not classified based on available information.

### Components:

#### LUBRICATING OILS, PETROLEUM, C20-50, HYDROTREATED:

|| Toxicity to fish : LL50 (Pimephales promelas (fathead minnow)): > 100 mg/l  
Exposure time: 96 h  
Test Type: static test  
Test substance: WAF  
Method: OECD Test Guideline 203



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	Remarks: <b>No toxicity at the limit of solubility</b>
Toxicity to daphnia and other aquatic invertebrates	: <b>EL50 (Daphnia magna (Water flea)): &gt; 10,000 mg/l</b> Exposure time: <b>48 h</b> Test Type: <b>static test</b> Test substance: <b>WAF</b> Method: <b>OECD Test Guideline 202</b>
Toxicity to algae/aquatic plants	: <b>NOEL (Pseudokirchneriella subcapitata (green algae)): &gt;= 100 mg/l</b> End point: <b>Growth inhibition</b> Exposure time: <b>72 h</b> Test Type: <b>static test</b> Test substance: <b>WAF</b> Method: <b>OECD Test Guideline 201</b>
Toxicity to fish (Chronic toxicity)	: <b>NOELR: &gt;= 1,000 mg/l</b> Exposure time: <b>14 d</b> Species: <b>Oncorhynchus mykiss (rainbow trout)</b>
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: <b>NOEL: 10 mg/l</b> Exposure time: <b>21 d</b> Species: <b>Daphnia (water flea)</b> Test substance: <b>WAF</b> Method: <b>OECD Test Guideline 211</b>

### Ecotoxicology Assessment

Acute aquatic toxicity	: <b>Not classified based on available information.</b>
Chronic aquatic toxicity	: <b>Not classified based on available information.</b>

### Distillates (Petroleum), Hydrotreated Heavy Paraffinic:

Toxicity to fish	: <b>LL50 (Fish): &gt; 100 mg/l</b> Exposure time: <b>96 h</b>
Toxicity to daphnia and other aquatic invertebrates	: <b>EL50 (Aquatic invertebrates): &gt; 10,000 mg/l</b> Exposure time: <b>48 h</b>
Toxicity to algae/aquatic plants	: <b>EL50 (Algae, algal mat (Algae)): &gt; 100 mg/l</b> Exposure time: <b>72 h</b>
Toxicity to fish (Chronic toxicity)	: <b>NOEC: 10 mg/l</b> Species: <b>Fish</b>
Toxicity to daphnia and other aquatic invertebrates	: <b>NOEC: 10 mg/l</b> Species: <b>Aquatic invertebrates</b>



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(Chronic toxicity)

### Ecotoxicology Assessment

Acute aquatic toxicity : Not classified based on available information.

Chronic aquatic toxicity : Not classified based on available information.

**Reaction Products of alcohols, C14-18, C18 unsat., esterified with phosphorus pentoxide and salted with amines, C12-14,-tert-alkyl:**

### Ecotoxicology Assessment

Acute aquatic toxicity : Harmful to aquatic life.

Acute aquatic toxicity Category 3; Harmful to aquatic life.

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Chronic aquatic toxicity Category 3; Harmful to aquatic life with long lasting effects.

**DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC:**

### Ecotoxicology Assessment

Acute aquatic toxicity : Not classified based on available information.

Chronic aquatic toxicity : Not classified based on available information.

**Distillates (petroleum), solvent-dewaxed light paraffinic:**

Toxicity to fish : LL50 (Pimephales promelas (fathead minnow)): > 100 mg/l  
Exposure time: 96 h  
Test Type: static test  
Test substance: WAF  
Method: OECD Test Guideline 203

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  
Method: OECD Test Guideline 202

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



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Test substance: **WAF**  
Method: **OECD Test Guideline 201**

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : **NOEL: 10 mg/l**  
Exposure time: **21 d**  
Species: **Daphnia magna (Water flea)**  
Test Type: **semi-static test**  
Test substance: **WAF**  
Method: **OECD Test Guideline 211**

### Ecotoxicology Assessment

Acute aquatic toxicity : **Not classified based on available information.**

Chronic aquatic toxicity : **Not classified based on available information.**

Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl:

Toxicity to fish : **LL50 (Oncorhynchus mykiss (rainbow trout)): ca. 24 mg/l**  
Exposure time: **96 h**  
Test Type: **static test**  
Test substance: **WAF**  
Method: **OECD Test Guideline 203**

Toxicity to daphnia and other aquatic invertebrates : **EL50 (Daphnia magna (Water flea)): ca. 91.4 mg/l**  
Exposure time: **48 h**  
Test Type: **static test**  
Test substance: **WAF**  
Method: **OECD Test Guideline 202**

Toxicity to algae/aquatic plants : **ErC50 (Pseudokirchneriella subcapitata (green algae)): 15 mg/l**  
End point: **Growth inhibition**  
Exposure time: **96 h**  
Test Type: **static test**  
Method: **OECD Test Guideline 201**

**NOEC (Pseudokirchneriella subcapitata (green algae)): 3.3 mg/l**  
End point: **Growth inhibition**  
Exposure time: **96 h**  
Test Type: **static test**  
Method: **OECD Test Guideline 201**

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : **NOEC: 0.12 mg/l**  
End point: **Reproduction Test**  
Exposure time: **21 d**



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Species: **Daphnia magna (Water flea)**  
Test Type: **semi-static test**  
Test substance: **WAF**  
Method: **OECD Test Guideline 211**

### Ecotoxicology Assessment

Acute aquatic toxicity : **Toxic to aquatic life.**  
**Acute aquatic toxicity Category 2; Toxic to aquatic life.**  
Chronic aquatic toxicity : **Toxic to aquatic life with long lasting effects.**  
**Chronic aquatic toxicity Category 2; Toxic to aquatic life with long lasting effects.**

**Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.:**

### Ecotoxicology Assessment

Acute aquatic toxicity :  
**Not classified based on available information.**  
Chronic aquatic toxicity : **Harmful to aquatic life with long lasting effects.**  
**Chronic aquatic toxicity Category 3; Harmful to aquatic life with long lasting effects.**

## 12.2 Persistence and degradability

### Components:

#### **LUBRICATING OILS, PETROLEUM, C20-50, HYDROTREATED:**

Biodegradability : Result: **Not readily biodegradable.**  
Biodegradation: **2 - 4 %**  
Exposure time: **28 d**  
Method: **OECD Test Guideline 301B**

**Reaction Products of alcohols, C14-18, C18 unsat., esterified with phosphorus pentoxide and salted with amines, C12-14,-tert-alkyl:**

Biodegradability : Biodegradation: **0 %**  
Exposure time: **28 d**  
Method: **Modified Sturm Test**

**Distillates (petroleum), solvent-dewaxed light paraffinic:**



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Biodegradability : Result: **Inherently biodegradable.**  
Biodegradation: **31 %**  
Exposure time: **28 d**  
Method: **OECD Test Guideline 301B**

Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl:

Biodegradability : Result: **Not readily biodegradable.**  
Biodegradation: **7.4 %**  
Exposure time: **28 d**  
Method: **Modified Sturm Test**

### 12.3 Bioaccumulative potential

#### Components:

**Reaction Products of alcohols, C14-18, C18 unsat., esterified with phosphorus pentoxide and salted with amines, C12-14,-tert-alkyl:**

Partition coefficient: n-octanol/water : log Pow: **8**

Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl:

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

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

#### Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Other adverse effects

#### Product:

Endocrine disrupting potential : This substance/mixture contains components considered to have endocrine disrupting properties for environment , according to REACH Article 57(f), Commission Regulation (EU) 2018/605 or Commission Delegated Regulation (EU) 2017/2100.



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Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Toxic to aquatic life.

### Components:

Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.:

Endocrine disrupting potential : The substance is considered to have endocrine disrupting properties according to REACH Article 57(f) for the environment.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.

## SECTION 14: Transport information

### 14.1 UN number

ADR : Not regulated as a dangerous good  
RID : Not regulated as a dangerous good  
IMDG : Not regulated as a dangerous good  
IATA\_P : Not regulated as a dangerous good

### 14.2 UN proper shipping name

ADR : Not regulated as a dangerous good  
RID : Not regulated as a dangerous good  
IMDG : Not regulated as a dangerous good  
IATA\_P : Not regulated as a dangerous good

### 14.3 Transport hazard class(es)

ADR : Not regulated as a dangerous good  
RID : Not regulated as a dangerous good  
IMDG : Not regulated as a dangerous good



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IATA\_P : Not regulated as a dangerous good

#### 14.4 Packing group

ADR : Not regulated as a dangerous good

RID : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA (Cargo) : Not regulated as a dangerous good

IATA\_P (Passenger) : Not regulated as a dangerous good

#### 14.5 Environmental hazards

Not regulated as a dangerous good

#### 14.6 Special precautions for user

Not applicable

#### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

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

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

Relevant EU provisions transposed through retained EU law

UK REACH List of restrictions (Annex 17) : Not applicable

UK REACH Candidate list of substances of very high concern (SVHC) for Authorisation : Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.

The Persistent Organic Pollutants Regulations (retained Regulation (EU) 2019/1021 as amended for Great Britain) : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

UK REACH List of substances subject to authorisation (Annex XIV) : Not applicable

Control of Major Accident Hazards Regulations : Not applicable



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2015 (COMAH)

### Other regulations:

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

TCSI	: Not in compliance with the inventory
TSCA	: All substances listed as active on the TSCA inventory
AIIIC	: Not in compliance with the inventory
DSL	: All components of this product are on the Canadian DSL
ENCS	: Not in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory
NZIoC	: On the inventory, or in compliance with the inventory

### 15.2 Chemical safety assessment

No data available

#### Inventories

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

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## SECTION 16: Other information

### Full text of H-Statements

H226	: Flammable liquid and vapour.
H302	: Harmful if swallowed.
H304	: May be fatal if swallowed and enters airways.
H315	: Causes skin irritation.
H317	: May cause an allergic skin reaction.
H318	: Causes serious eye damage.
H411	: Toxic to aquatic life with long lasting effects.
H412	: Harmful to aquatic life with long lasting effects.

### Full text of other abbreviations

Acute Tox.	: Acute toxicity
Aquatic Chronic	: Long-term (chronic) aquatic hazard



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Asp. Tox.	: Aspiration hazard
Eye Dam.	: Serious eye damage
Flam. Liq.	: Flammable liquids
Skin Irrit.	: Skin irritation
Skin Sens.	: Skin sensitisation

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

### Further information

Internal information : R0517046

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a



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