



SAFETY DATA SHEET
ZEREX™ GREEN HD PRE-CHARGED
Antifreeze Coolant

Version: 2.0

Revision Date: 08.11.2021

Print Date: 19/11/2021

Conforms to EU Regulation 1907/2006/EC as amended. - SDSGHS_RW

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

1.1 Product identifier

Trade name : ZEREX™ GREEN HD PRE-CHARGED
Antifreeze Coolant

Product code : ZXPC1

1.3 Details of the supplier of the safety data sheet

Ellis Enterprises B.V., an affiliate of Valvoline
Wieldrechtseweg 39
3316 BG Dordrecht
Netherlands
+31 (0)78 654 3500 (in the Netherlands), or
contact your local CSR contact person

SDS@valvoline.com

1.4 Emergency telephone number

+1-800-VALVOLINE (+1-800-825-8654), or
contact your local emergency telephone number at
+353 01 809 2566

Product Information

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4

H302: Harmful if swallowed.

Specific target organ toxicity - repeated
exposure, Category 2, Kidney

H373: May cause damage to organs through
prolonged or repeated exposure if swallowed.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :





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Signal word	:	Warning	
Hazard statements	:	H302 H373	Harmful if swallowed. May cause damage to organs (Kidney) through prolonged or repeated exposure if swallowed.
Precautionary statements	:	Prevention: P260 P264 P270	Do not breathe mist or vapours. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product.
		Response: P301 + P312 + P330	IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
		P314	Get medical advice/ attention if you feel unwell.
		Disposal: P501	Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:

Ethenediol
Sodium nitrite

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.

Additional advice

No information available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
Ethenediol	107-21-1 203-473-3 01-2119456816-28-xxxx	Acute Tox.4; H302 STOT RE2; H373	>= 90,00 - <= 100,00
dipotassium	7758-11-4	Acute Tox.3; H311	>= 0,50 - < 1,00



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hydrogenorthophosphate	231-834-5		
Borax Decahydrate	1303-96-4 215-540-4	Eye Irrit.2; H319 Repr.1B; H360FD	>= 0,30 - < 0,50
Sodium nitrite	7632-00-0 231-555-9 01-2119471836-27-xxxx	Ox. Sol.3; H272 Acute Tox.3; H301 Eye Irrit.2; H319 Aquatic Acute1; H400	>= 0,25 - < 0,50

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
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 : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Induce vomiting immediately and call a physician.
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.
Take victim immediately to hospital.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No symptoms known or expected.
- Risks : Effects of acute ethylene glycol poisoning appear in three fairly distinct stages. The initial stage occurs shortly after exposure, lasts 6-12 hours, and is characterized by central nervous system effects (transient exhilaration, nausea,



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vomiting, and in severe cases, coma, convulsions, and possible death). The second stage lasts from 12-36 hours after exposure and is initiated by the onset of coma. This phase is characterized by tachypnea, tachycardia, mild hypotension, cyanosis, and in severe cases, pulmonary edema, bronchopneumonia, cardiac enlargement, and congestive failure. The final stage occurs 24-72 post-exposure and is characterized by renal failure, ranging from a mild increase in blood urea nitrogen and creatinine followed by recovery, to complete anuria with acute tubular necrosis that can lead to death. Oxaluria is found in most cases. The most significant laboratory finding in ethylene glycol intoxication is severe metabolic acidosis.
Harmful if swallowed.
May cause damage to organs through prolonged or repeated exposure if swallowed.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : This product contains ethylene glycol. Ethanol decreases the metabolism of ethylene glycol to toxic metabolites. Ethanol should be administered as soon as possible in cases of severe poisoning since the elimination half-life of ethylene glycol is 3 hours. If medical care will be delayed several hours, give the patient three to four 1-ounce oral "shots" of 86-proof or higher whiskey before or during transport to the hospital. Fomepizole (4-methylpyrazole) is an effective antagonist of alcohol dehydrogenase, and as such, may be used as an antidote in the treatment of ethylene glycol poisoning. Hemodialysis effectively removes ethylene glycol and its metabolites from the body.

No hazards which require special first aid measures.

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

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 : No hazardous combustion products are known

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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. 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 : Neutralise with acid. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

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

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes.



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For personal protection see section 8.
 Smoking, eating and drinking should be prohibited in the application area.
 Dispose of rinse water in accordance with local and national regulations.

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

Hygiene measures : When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Ethanediol	107-21-1	TWA	20 ppm 52 mg/m ³	2000/39/EC
		STEL	40 ppm 104 mg/m ³	2000/39/EC
		OELV - 8 hrs (TWA)	20 ppm 52 mg/m ³	IE OEL
		OELV - 15 min (STEL)	40 ppm 104 mg/m ³	IE OEL
Borax Decahydrate	1303-96-4	OELV - 8 hrs (TWA)	2 mg/m ³	IE OEL



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8.2 Exposure controls

Personal protective equipment

- Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
- Hand protection
- Remarks : The suitability for a specific workplace should be discussed
with the producers of the protective gloves.
- Skin and body protection : Impervious clothing
Choose body protection according to the amount and
concentration of the dangerous substance at the work place.
- Respiratory protection : No personal respiratory protective equipment normally
required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance : liquid
- Odour : No data available
- Odour Threshold : No data available
- pH : 10 - 11,2
Concentration: 100 %
- Melting point/freezing point : No data available
- Boiling point/boiling range : 100 °C
(1.013,333333 hPa)
Calculated Phase Transition Liquid/Gas
- Flash point : > 250 °C
- Evaporation rate : No data available
- Flammability (solid, gas) : No data available
- Upper explosion limit / Upper
flammability limit : 15,3 %(V)
GLP: Calculated Explosive Limit



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Lower explosion limit / Lower flammability limit	:	3,2 %(V) GLP: Calculated Explosive Limit
Vapour pressure	:	23,3333333 hPa (20 °C) Calculated Vapor Pressure
Relative vapour density	:	No data available
Relative density	:	No data available
Density	:	1,1229 g/cm ³ (15,6 °C)
Solubility(ies)	:	
Water solubility	:	No data available
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	:	No data available
Oxidizing properties	:	No data available

9.2 Other information

Self-ignition : No data available

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 : No decomposition if stored and applied as directed.

10.4 Conditions to avoid



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Conditions to avoid : excessive heat

No data available

10.5 Incompatible materials

Materials to avoid : Aldehydes
Alkali metals
Alkaline earth metals
Strong acids
strong alkalis
Strong oxidizing agents
Sulphur compounds

Not applicable

10.6 Hazardous decomposition products

Hazardous decomposition products : No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Harmful if swallowed.

Product:

Acute oral toxicity : Acute toxicity estimate : 519,46 mg/kg
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate : > 2.000 mg/kg
Method: Calculation method

Components:

ETHYLENE GLYCOL:

Acute oral toxicity : LD0 (Human): estimated 1,56 g/kg

Assessment: The component/mixture is moderately toxic after single ingestion.

Acute inhalation toxicity : LC50 (Rat): 10,9 mg/l
Exposure time: 1 h
Test atmosphere: dust/mist



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	Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity	: LD50 (Rabbit): 9.530 mg/kg
Acute toxicity (other routes of administration)	: LD50 (Rat): 5.010 mg/kg Application Route: Intraperitoneal
	LD50 (Rat): 3.260 mg/kg Application Route: Intravenous

Components:

DIPOTASSIUM PHOSPHATE:

Acute oral toxicity	: LD50 (Rat): > 500 mg/kg
	LD50 (Rat, female): > 2.000 mg/kg Method: OECD Test Guideline 420 Assessment: The substance or mixture has no acute oral toxicity
Acute dermal toxicity	: LD50 (Rabbit): > 300 mg/kg
	LD50 (Rabbit): > 5.000 mg/kg Method: OECD Test Guideline 402

Components:

SODIUM BORATE DECAHYDRATE:

Acute oral toxicity	: LD50 (Rat): > 2.000 mg/kg Assessment: The substance or mixture has no acute oral toxicity Remarks: The toxicological data has been taken from products of similar composition. No mortality observed at this dose.
Acute inhalation toxicity	: LC50 (Rat): > 2,04 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 GLP: yes Assessment: The substance or mixture has no acute inhalation toxicity Remarks: The toxicological data has been taken from products of similar composition. No mortality observed at this dose.
Acute dermal toxicity	: LD50 (Rabbit): > 2.000 mg/kg



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GLP: **yes**
Assessment: **The substance or mixture has no acute dermal toxicity**
Remarks: **The toxicological data has been taken from products of similar composition. No mortality observed at this dose.**

Components:

SODIUM NITRITE:

Acute oral toxicity : **LD50 (Rat): 180 mg/kg**
Acute inhalation toxicity : **LC50 (Rat): 5,5 mg/l**
Exposure time: **4 h**
Test atmosphere: **dust/mist**

Skin corrosion/irritation

Not classified based on available information.

Components:

ETHYLENE GLYCOL:

Species: **Rabbit**
Result: **No skin irritation**

DIPOTASSIUM PHOSPHATE:

Species: **Rabbit**
Result: **Slight, transient irritation**

SODIUM BORATE DECAHYDRATE:

Species: **Rabbit**
Result: **Slight, transient irritation**

SODIUM NITRITE:

Result: **No skin irritation**

Serious eye damage/eye irritation

Not classified based on available information.

Components:

ETHYLENE GLYCOL:

Result: **Slight, transient irritation**

DIPOTASSIUM PHOSPHATE:

Species: **Rabbit**
Result: **Slight, transient irritation**

SODIUM BORATE DECAHYDRATE:



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Species: **Rabbit**
Result: **Irritating to eyes.**

SODIUM NITRITE:

Result: **Irritating to eyes.**

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Components:

ETHYLENE GLYCOL:

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

DIPOTASSIUM PHOSPHATE:

Test Type: **Local lymph node assay**
Species: **Mouse**
Assessment: **Did not cause sensitisation on laboratory animals.**
Method: **OECD Test Guideline 429**
Remarks: **The toxicological data has been taken from products of similar composition.**

SODIUM BORATE DECAHYDRATE:

Test Type: **Buehler Test**
Species: **Guinea pig**
Assessment: **Does not cause skin sensitisation.**
Remarks: **The toxicological data has been taken from products of similar composition.**

Germ cell mutagenicity

Not classified based on available information.

Components:

ETHYLENE GLYCOL:

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

DIPOTASSIUM PHOSPHATE:

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: **The toxicological data has been taken from products of similar composition.**



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Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

Components:

SODIUM BORATE DECAHYDRATE:

Reproductive toxicity - Assessment : Clear evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

May cause damage to organs (Kidney) through prolonged or repeated exposure if swallowed.

Components:

ETHYLENE GLYCOL:

Exposure routes: Ingestion
Target Organs: Kidney
Assessment: May cause damage to organs through prolonged or repeated exposure.

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks: No data available

SECTION 12: Ecological information

12.1 Toxicity

Product:

Ecotoxicology Assessment
Short-term (acute) aquatic hazard : Acute aquatic toxicity Category 3; Harmful to aquatic life.

Long-term (chronic) aquatic hazard : Not classified based on available information.



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Components:

Ethenediol

Toxicity to fish	: LC50 (<i>Lepomis macrochirus</i> (Bluegill sunfish)): 27.540 mg/l Exposure time: 96 h Test Type: static test
	LC50 (<i>Pimephales promelas</i> (fathead minnow)): 8.050 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	: LC50 (<i>Daphnia magna</i> (Water flea)): > 10.000 mg/l Exposure time: 48 h Test Type: static test
Toxicity to algae	: EC50 (<i>Pseudokirchneriella subcapitata</i> (green algae)): 6.500 - 13.000 mg/l End point: Growth inhibition Exposure time: 7 Days
Toxicity to fish (Chronic toxicity)	: NOEC: 32.000 mg/l Exposure time: 7 d Species: <i>Pimephales promelas</i> (fathead minnow)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: 24.000 mg/l Exposure time: 7 d Species: <i>Daphnia magna</i> (Water flea)

Ecotoxicology Assessment

Short-term (acute) aquatic hazard	: Not classified based on available information.
Long-term (chronic) aquatic hazard	: Not classified based on available information.

dipotassium hydrogenorthophosphate

Toxicity to fish	: LC50 (<i>Oncorhynchus mykiss</i> (rainbow trout)): > 100 mg/l Exposure time: 96 h Test Type: semi-static test Method: OECD Test Guideline 203 Remarks: The toxicological data has been taken from products of similar composition.
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 Method: OECD Test Guideline 202 Remarks: The toxicological data has been taken from products of similar composition.



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Toxicity to algae : **EC50 (Desmodesmus subspicatus (green algae))**: > 100 mg/l
End point: **Growth inhibition**
Exposure time: **72 h**
Test Type: **static test**
Method: **OECD Test Guideline 201**
Remarks: **The toxicological data has been taken from products of similar composition.**

NOEC (Desmodesmus subspicatus (green algae)): > 100 mg/l
End point: **Growth inhibition**
Exposure time: **72 h**
Test Type: **static test**
Method: **OECD Test Guideline 201**
Remarks: **The toxicological data has been taken from products of similar composition.**

Borax Decahydrate

Toxicity to fish : **LC50 (Fish)**: > 100 mg/l
Exposure time: **96 h**
Remarks: **The toxicological data has been taken from products of similar composition.**

Toxicity to daphnia and other aquatic invertebrates : **LC50 (Daphnia magna (Water flea))**: 133 mg/l
Exposure time: **48 h**
Test Type: **static test**
Remarks: **The toxicological data has been taken from products of similar composition.**

Toxicity to algae : **NOEC (Dunaliella tertiolecta (marine algae))**: 50 mg/l
End point: **Growth inhibition**
Exposure time: **240 h**
Test Type: **static test**
Remarks: **Information refers to the main component.**

Toxicity to fish (Chronic toxicity) : **NOEC**: 13 mg/l
Exposure time: **4 d**
Species: **Danio rerio (zebra fish)**
Remarks: **Information refers to the main component.**

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : **NOEC**: 16,6 mg/l
Exposure time: **28 d**
Species: **Aquatic invertebrates**
Test Type: **flow-through test**
Remarks: **Information refers to the main component.**

Sodium nitrite

Toxicity to fish : **LC50 (Pimephales promelas (fathead minnow))**: 2,35 - 3,81



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	mg/l Exposure time: 96 h Test Type: flow-through test
	LC50 (Oncorhynchus mykiss (rainbow trout)): 0,54 - 26,3 mg/l Exposure time: 96 h Test Type: flow-through test
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 15,4 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202
Toxicity to algae	: EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l Exposure time: 72 h Test Type: Growth inhibition Method: OECD Test Guideline 201
M-Factor (Short-term (acute) aquatic hazard)	: 1
Toxicity to bacteria	: EC10 (activated sludge): 210 mg/l Exposure time: 3 h Test Type: Static Method: OECD Test Guideline 209
Toxicity to fish (Chronic toxicity)	: NOEC: 6,16 mg/l Exposure time: 31 d Species: Ictalurus catus (catfish) Test Type: flow-through test
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: NOEC: 9,86 mg/l Exposure time: 80 d Species: Aquatic invertebrates Test Type: static test

12.2 Persistence and degradability

Components:

Ethenediol

Biodegradability	: Result: Readily biodegradable. Biodegradation: 90 - 100 % Exposure time: 10 d Method: OECD Test Guideline 301
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dipotassium hydrogenorthophosphate

Biodegradability	: Remarks: The methods for determining biodegradability are
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not applicable to inorganic substances.

12.3 Bioaccumulative potential

Components:

Ethanediol

Bioaccumulation : Species: **Crayfish (Procambarus)**
Exposure time: **61 d**
Concentration: **1000 mg/l**
Bioconcentration factor (BCF): **0,27**
Method: **Flow through**

Partition coefficient: n-octanol/water : log Pow: **-1,36**

Sodium nitrite

Partition coefficient: n-octanol/water : log Pow: **-3,700 (25 °C)**

12.4 Mobility in soil

Components:

Sodium nitrite

Stability in soil : Remarks: **Not expected to adsorb on soil.**

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:

Further information : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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



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SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Product : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.
- Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14: Transport information

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

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



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REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

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

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

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Conditions of restriction for the following entries should be considered:
Number on list 3

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.
Not applicable

Other regulations:

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

Young people under 18 years old are not allowed to work with this product according to the EU Directive 94/33/EC on the protection of young people at work.

Pregnant women may only work with or be exposed to this product if, based on a risk assessment in the context of the activities and risk management measures taken, the exposure will not lead to any injury for mother and/or child (Maternity Protection Directive 92/85/EC as amended).

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



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AIIC	:	Not in compliance with the inventory
DSL	:	All components of this product are on the Canadian DSL
ENCS	:	Not in compliance with the inventory
ISHL	:	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	:	Not in compliance with the inventory
TECI	:	Not in compliance with the inventory

Inventories

AIIC (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)

15.2 Chemical safety assessment

No data available

SECTION 16: Other information

Further information

Internal information : 000000196019

Full text of H-Statements

H272 May intensify fire; oxidizer.
H301 Toxic if swallowed.
H302 Harmful if swallowed.



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H311	Toxic in contact with skin.
H319	Causes serious eye irritation.
H360FD	May damage fertility. May damage the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure if swallowed.
H400	Very toxic 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 (+31 (0)78 654 3500).

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.
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



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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

ABM : Water Hazard Class for the Netherlands
ADR : Agreement concerning the International Carriage of Dangerous Goods by Road.
ADNR: Regulation for the Carriage of Dangerous Substances on the Rhine
CLP : Classification, Labelling and Packaging
CSA : Chemical Safety Assessment
CSR : Chemical Safety Report
DNEL : Derived No Effect Level.
EINECS : European Inventory of Existing Commercial Chemical Substances.
ELINCS : European List of Notified Chemical Substances
PEC : Predicted Effect Concentration
PEL : Permissible Exposure Limits
PNEC : Predicted No Effect Concentration
R-phrase : Risk phrase
REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals
RID : Regulation Concerning the International Transport of Dangerous Goods by Rail
S-phrase: Safety phrase
WGK : German Water Hazard Class