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GHS classification in accordance with the Hazardous Products Regulations

### **SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

**Product identifier** 

Trade name : ZEREX™ G05®

Antifreeze Coolant

Details of the supplier of the safety data

sheet

Valvoline Canada Corp 905 Winston Churchill Blvd Mississauga ON L5J 4P2

Canada

1-800-TEAMVAL

**Emergency telephone number** 

1-800-VALVOLINE (1-800-825-8654)

**Regulatory Information Number** 

1-800-TEAMVAL

Product Information 1-800-TEAMVAL

## **SECTION 2. HAZARDS IDENTIFICATION**

**GHS Classification** 

Acute toxicity (Oral) : Category 4

Reproductive toxicity : Category 1B

Specific target organ toxicity - repeated exposure (Oral)

: Category 2 (Kidney, Liver)

**GHS** label elements

Hazard pictograms





Signal word : Danger

Hazard statements : H302 Harmful if swallowed.

H360 May damage fertility or the unborn child.

H373 May cause damage to organs (Kidney, Liver) through

prolonged or repeated exposure if swallowed.

Precautionary statements : **Prevention:** 

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read

and understood.

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

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P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/ protective clothing/ eye protection/

face protection.

Response:

P301 + P312 + P330 IF SWALLOWED: Call a POISON

CENTER/doctor if you feel unwell. Rinse mouth.

P308 + P313 IF exposed or concerned: Get medical advice/

attention. Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

#### Other hazards

None known.

### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

**Hazardous components** 

| Chemical name                  | CAS-No.   | Classification      | Concentration (%) |
|--------------------------------|-----------|---------------------|-------------------|
| ETHYLENE GLYCOL                | 107-21-1  | Acute Tox. 4; H302  | >=50.00 - < 70.00 |
|                                |           | STOT RE 2; H373     |                   |
| DIETHYLENE GLYCOL              | 111-46-6  | Agusto Toy, 4: U202 | >=1.00 - < 5.00   |
| DIETHTLENE GLTCOL              | 111-40-0  | Acute Tox. 4; H302  | >=1.00 - < 5.00   |
|                                |           | STOT RE 2; H373     |                   |
|                                |           |                     |                   |
| SODIUM BENZOATE                | 532-32-1  | Eye Irrit. 2A; H319 | >=1.00 - < 5.00   |
| DISODILIM TETRAPORATE          | 1330-43-4 | Dong 1D: U260       | >-0.101.00        |
| DISODIUM TETRABORATE ANHYDROUS | 1330-43-4 | Repr. 1B; H360      | >=0.10 - < 1.00   |

## **SECTION 4. 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.

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If inhaled : If unconscious, place in recovery position and seek medical

If symptoms persist, call a physician.

: First aid is not normally required. However, it is In case of skin contact

recommended that exposed areas be cleaned by washing

with soap and water.

In case of eye contact : Flush eyes with water as a precaution.

> Remove contact lenses. Protect unharmed eye.

If eye irritation persists, consult a specialist.

If swallowed : Obtain medical attention.

Rinse mouth with water.

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

: 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, 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 tachypnia, tachycardia, mild hypotension, cyanosis, and in severe cases, pulmonary edema, bronchopneumonia, cardiac enlargement, and congestive failure. The final stage occurs 24-72 postexposure 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.

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)

Cough

pain in the abdomen and lower back

cyanosis (causes blue coloring of the skin and nails from lack

of oxygen)

lung edema (fluid buildup in the lung tissue)

acute kidney failure (sudden slowing or stopping of urine

production) Convulsions

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Harmful if swallowed.

May damage fertility or the unborn child.

Notes to physician : 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.

## **SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Water spray Foam

Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

: High volume water jet

Specific hazards during

firefighting

: Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion

products

: Alcohols Aldehydes

carbon dioxide and carbon monoxide

ethers toxic fumes Hydrocarbons Sodium oxides

Specific extinguishing

methods

:

Product is compatible with standard fire-fighting agents.

Further information : Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

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for firefighters

Special protective equipment : In the event of fire, wear self-contained breathing apparatus.

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions. protective equipment and emergency procedures

: Use personal protective equipment.

Ensure adequate ventilation.

Persons not wearing protective equipment should be excluded

from area of spill until clean-up has been completed.

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.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

Other information : Comply with all applicable federal, state, and local regulations.

#### **SECTION 7. HANDLING AND STORAGE**

Advice on safe handling : Do not breathe vapours/dust.

Do not smoke.

Container hazardous when empty.

Avoid exposure - obtain special instructions before use.

Avoid contact with skin and eyes.

Smoking, eating and drinking should be prohibited in the

application area.

For personal protection see section 8.

Dispose of rinse water in accordance with local and national

regulations.

Conditions for safe storage

: Keep container tightly closed in a dry and well-ventilated

place.

Observe label precautions.

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

| Compension with mempiace control parameters |         |            |              |       |  |
|---|---------|------------|--------------|-------|--|
| Components                                  | CAS-No. | Value type | Control      | Basis |  |
|   |         | (Form of   | parameters / |       |  |
|   |         | exposure)  | Permissible  |       |  |

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|                                |           |       | concentration                          |           |
|--------------------------------|-----------|-------|--|-----------|
| ETHYLENE GLYCOL                | 107-21-1  | (c)   | 100 mg/m3                              | CA AB OEL |
|                                |           | TWA   | 10 mg/m3 particulate                   | CA BC OEL |
|                                |           | STEL  | 20 mg/m3 particulate                   | CA BC OEL |
|                                |           | С     | 100 mg/m3<br>aerosol                   | CA BC OEL |
|                                |           | С     | 50 ppm<br>Vapour                       | CA BC OEL |
|                                |           | С     | 50 ppm<br>127 mg/m3<br>Vapour and mist | CA QC OEL |
| DISODIUM TETRABORATE ANHYDROUS | 1330-43-4 | TWA   | 1 mg/m3                                | CA AB OEL |
|                                |           | STEL  | 3 ppm                                  | CA AB OEL |
|                                |           | TWAEV | 1 mg/m3                                | CA QC OEL |
|                                |           | TWA   | 2 mg/m3<br>Inhalable<br>(Borate)       | CA BC OEL |
|                                |           | STEL  | 6 mg/m3<br>Inhalable<br>(Borate)       | CA BC OEL |

#### **Engineering measures**

: 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

In the case of vapour formation use a respirator with an approved filter.

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

Hand protection Remarks

: The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Eye protection : Not required under normal conditions of use. Wear splash-

proof safety goggles if material could be misted or splashed

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into eyes.

Skin and body protection : Wear as appropriate:

Impervious clothing

Safety shoes

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Wear resistant gloves (consult your safety equipment

supplier).

Hygiene measures : Wash hands before breaks and at the end of workday.

When using do not eat or drink. When using do not smoke.

#### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical state : liquid

Colour : light yellow

Odour : No data available

Odour Threshold : No data available

pH : Average 8.0

Melting point/freezing point : No data available

Boiling point/boiling range : 225 °F / 107 °C

(1013.3 hPa)

Flash point :  $> 250.0 \,^{\circ}\text{F} / > 121.1 \,^{\circ}\text{C}$ 

Method: Cleveland open cup

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper explosion limit : 15.3 %(V)

Lower explosion limit : 1.7 %(V)

Vapour pressure : 1.800 mmHg (68.00 °F)

Relative vapour density : > 1.000AIR=1

Relative density : No data available

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Density : 1.0779 g/cm3 (15.56 °C)

Solubility(ies)

Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

: No data available

Thermal decomposition : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : No data available

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

Exposure to moisture

Incompatible materials : Acids

Aldehydes Alkali metals

Alkaline earth metals

Bases iron salts strong alkalis

Strong oxidizing agents Sulphur compounds

Hazardous decomposition

products

Alcohols

Aldehydes

carbon dioxide and carbon monoxide

ethers

Hydrocarbons

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Organic acids Sodium oxides ketones

#### **SECTION 11. TOXICOLOGICAL INFORMATION**

Information on likely routes of : Inhalation

exposure

Skin contact

Eye Contact Ingestion

Acute toxicity

Harmful if swallowed.

**Product:** 

Acute oral toxicity

Remarks: Ingestion of medications contaminated with diethylene glycol has caused kidney failure and death in humans. Products containing diethylene glycol should be

considered toxic by ingestion.

Acute dermal toxicity : Remarks: Skin absorption of this material (or a component)

may be increased through injured skin.

**Components:** 

ETHYLENE GLYCOL:

Acute oral toxicity : LD0 (Human): Estimated 1.56 g/kg

Assessment: The component/mixture is classified as acute

oral toxicity, category 4.

Acute inhalation toxicity : LC50 (Rat): 10.9 mg/l

Exposure time: 1 h

Test atmosphere: dust/mist

Assessment: No adverse effect has been observed in acute

inhalation toxicity tests.

Acute dermal toxicity : LD50 (Rabbit): 9,530 mg/kg

DIETHYLENE GLYCOL:

Acute oral toxicity : LD50 (Human): Expected 1,120 mg/kg

Target Organs: Kidney

Acute inhalation toxicity : LC50 (Rat): > 4.6 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: No adverse effect has been observed in acute

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inhalation toxicity tests.

Acute dermal toxicity : LD50 (Rabbit): 13,300 mg/kg

**SODIUM BENZOATE:** 

Acute oral toxicity : LD50 (Rat, male and female): 3,450 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 12.2 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Remarks: Information given is based on data obtained from

similar substances.

**DISODIUM TETRABORATE ANHYDROUS:** 

Acute inhalation toxicity : LC50 (Rat): > 2.03 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Assessment: No adverse effect has been observed in acute

inhalation toxicity tests.

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

Assessment: No adverse effect has been observed in acute

dermal toxicity tests.

### Skin corrosion/irritation

Not classified based on available information.

Components:

ETHYLENE GLYCOL:

Species: Rabbit

Result: No skin irritation

**DIETHYLENE GLYCOL:** 

Species: Human

Result: Slight, transient irritation

SODIUM BENZOATE:

Result: Slight, transient irritation

**DISODIUM TETRABORATE ANHYDROUS:** 

Species: Rabbit

Result: No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

**Product:** 

Remarks: Unlikely to cause eye irritation or injury.

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### Components:

ETHYLENE GLYCOL:

Result: Slight, transient irritation

**DIETHYLENE GLYCOL:** 

Species: Rabbit

Result: Slight, transient irritation

SODIUM BENZOATE:

Species: Rabbit

Result: Irritating to eyes.

Method: OECD Test Guideline 405

**DISODIUM TETRABORATE ANHYDROUS:** 

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:

ETHYLENE GLYCOL:

Test Type: Maximisation Test

Species: Guinea pig

Assessment: Does not cause skin sensitisation.

DIETHYLENE GLYCOL: Test Type: Maximisation Test

Species: Guinea pig

Method: Directive 67/548/EEC, Annex V, B.6.

Result: Did not cause sensitisation on laboratory animals.

### **DISODIUM TETRABORATE ANHYDROUS:**

Test Type: Buehler Test Species: Guinea pig

Assessment: Does not cause skin sensitisation.

Method: OECD Test Guideline 406

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

**DIETHYLENE GLYCOL:** 

Genotoxicity in vitro : Test Type: Ames test

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Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative GLP: yes

: Test species: Chinese hamster ovary cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 479

Result: negative GLP: yes

Genotoxicity in vivo : Test Type: In vivo micronucleus test

Test species: Mouse

Method: OECD Test Guideline 474

Result: negative

GLP: yes

#### Carcinogenicity

Not classified based on available information.

### Reproductive toxicity

May damage fertility or the unborn child.

#### Components:

DISODIUM TETRABORATE ANHYDROUS:

Reproductive toxicity - : 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

Not classified based on available information.

#### **Components:**

ETHYLENE GLYCOL: Exposure routes: Ingestion Target Organs: Kidney, Liver

Assessment: May cause damage to organs through prolonged or repeated exposure.

## DIETHYLENE 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.

**Experience with human exposure** 

### **Components:**

**DIETHYLENE GLYCOL:** 

Liver

#### **Further information**

Product:

Remarks: No data available

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### **SECTION 12. ECOLOGICAL INFORMATION**

Ecotoxicity Product:

Ecotoxicology Assessment

Acute aquatic toxicity : Not classified based on available information.

Chronic aquatic toxicity : Not classified based on available information.

**Components:** 

ETHYLENE GLYCOL:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 27,540 mg/l

Exposure time: 96 h Test Type: static test

LC50 (Pimephales promelas (fathead minnow)): 8,050 mg/l

Exposure time: 96 h

Toxicity to daphnia and other

aquatic invertebrates

: LC50 (Daphnia magna (Water flea)): > 10,000 mg/l

Exposure time: 48 h Test Type: static test

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 6,500 -

13,000 mg/l

End point: Growth inhibition Exposure time: 7 Days

Toxicity to fish (Chronic

toxicity)

: NOEC (Pimephales promelas (fathead minnow)): 32,000 mg/l

Exposure time: 7 d

Toxicity to daphnia and other aquatic invertebrates

(Chronic toxicity)

: NOEC (Daphnia magna (Water flea)): 24,000 mg/l

Exposure time: 7 d

**DIETHYLENE GLYCOL:** 

Toxicity to fish : LC50 (Fathead minnow (Pimephales promelas)): 75,210 mg/l

Exposure time: 96 h

Test Type: flow-through test

Toxicity to daphnia and other

aquatic invertebrates

: LC50 (Water flea (Daphnia magna)): > 10,000 mg/l

Exposure time: 24 h Test Type: static test Method: DIN 38412

**SODIUM BENZOATE:** 

Toxicity to fish : LC50 (Fathead minnow (Pimephales promelas)): > 100 mg/l

Exposure time: 96 h Test Type: static test

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Method: Static Remarks: Mortality

Toxicity to daphnia and other

aquatic invertebrates

: LC50 (Water flea (Daphnia magna)): > 100 mg/l

Exposure time: 96 h Test Type: static test Method: Static

Remarks: Mortality

**DISODIUM TETRABORATE ANHYDROUS:** 

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 79.7 mg/l

Exposure time: 96 h

Remarks: Information refers to the main component.

Toxicity to algae : NOEC (Pseudokirchneriella subcapitata (green algae)): 17.5

mg/l

End point: Growth inhibition Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

Remarks: Information refers to the main component.

Toxicity to fish (Chronic

toxicity)

: NOEC (Danio rerio (zebra fish)): 5.6 mg/l

Exposure time: 34 d Test Type: semi-static test

Method: OECD Test Guideline 210

Remarks: Information refers to the main component.

Persistence and degradability

Components:

ETHYLENE GLYCOL:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 90 - 100 %

Exposure time: 10 d

Method: OECD Test Guideline 301

**DIETHYLENE GLYCOL:** 

Biodegradability : Result: Readily biodegradable.

Biodegradation: 70 - 80 %

Exposure time: 28 d

Method: OECD Test Guideline 301B

**SODIUM BENZOATE:** 

Biodegradability : Result: Readily biodegradable.

Biodegradation: 88 % Exposure time: 28 d

Method: OECD Test Guideline 301

**DISODIUM TETRABORATE ANHYDROUS:** 

Biodegradability : Result: The methods for determining biodegradability are not

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applicable to inorganic substances.

No data available

**Bioaccumulative potential** 

**Components:** 

ETHYLENE GLYCOL:

Bioaccumulation : Species: Crayfish (Procambarus)

Bioconcentration factor (BCF): 0.27

Exposure time: 61 d Concentration: 1000 mg/l Method: Flow through

Partition coefficient: n-

octanol/water

: log Pow: -1.36

**DIETHYLENE GLYCOL:** 

Bioaccumulation : Species: Leuciscus idus (Golden orfe)

Bioconcentration factor (BCF): 100

Partition coefficient: n-

octanol/water

: log Pow: -1.47

No data available
Mobility in soil
Components:
No data available
Other adverse effects
No data available

**Product:** 

Additional ecological

information

: No data available

#### **Components:**

### **SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods** 

General advice : Do not dispose of waste into sewer.

Do not contaminate ponds, waterways or ditches with

chemical or used container.

Send to a licensed waste management company.

Dispose of in accordance with all applicable local, state and

federal regulations.

Contaminated packaging : Empty remaining contents.

Dispose of as unused product.

Empty containers should be taken to an approved waste

handling site for recycling or disposal.

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| Do not re-use empty containers.   |                           |                  |                       |                  |                                    |
|-----------------------------------|---------------------------|------------------|-----------------------|------------------|------------------------------------|
| SECTION 14. TRANSPORT INFORMATION |                           |                  |                       |                  |                                    |
| International tr                  | ansport regulations       |                  |                       |                  |                                    |
| REGULATION                        |                           |                  |                       |                  |                                    |
| ID NUMBER                         | PROPER SHIPPING NAME      | *HAZARD<br>CLASS | SUBSIDIARY<br>HAZARDS | PACKING<br>GROUP | MARINE<br>POLLUTANT /<br>LTD. QTY. |
| U.S. DOT - ROA                    | AD                        |                  |                       |                  |                                    |
|                                   | Not dangerous goods       |                  |                       |                  |                                    |
|                                   |                           |                  |                       |                  |                                    |
| CFR_RAIL_C                        | Not dangerous goods       |                  |                       |                  |                                    |
| U.S. DOT - INLAN                  | ID WATERWAYS              |                  |                       |                  |                                    |
|                                   | Not dangerous goods       |                  |                       |                  |                                    |
| TDG_ROAD_C                        |                           |                  |                       |                  |                                    |
| TEG_ROAD_O                        | Not dangerous goods       |                  |                       |                  |                                    |
|                                   |                           |                  |                       |                  |                                    |
| TDG_RAIL_C                        | Not dangerous goods       |                  |                       |                  |                                    |
|                                   | Not dangerous goods       |                  |                       |                  |                                    |
| TDG_INWT_C                        |                           |                  |                       |                  |                                    |
| Not dangerous goods               |                           |                  |                       |                  |                                    |
| INTERNATION                       | MADITIME DANGEDOUG CO     | 200              |                       |                  |                                    |
| INTERNATIONAL                     | Not dangerous goods       | אטכ <u>י</u>     |                       |                  |                                    |
|                                   | <u>J</u> <del>J</del>     |                  |                       |                  |                                    |
| INTERNATIONAL                     | . AIR TRANSPORT ASSOCIATI | ON - CARGO       |                       |                  |                                    |
|                                   | Not dangerous goods       |                  |                       |                  |                                    |
|                                   |                           |                  |                       |                  |                                    |

# MX\_DG

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods

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| Niet des seus seus de   |  |
|-------------------------|--|
| Not gangerous googs     |  |
| i ioi dai igoi da godao |  |
|                         |  |
|                         |  |

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

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

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

### **SECTION 15. REGULATORY INFORMATION**

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

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

DSL : All components of this product are on the Canadian DSL

AICS : On the inventory, or in compliance with the inventory

ENCS : Not in compliance with the inventory

KECI : Not in compliance with the inventory

PICCS : Not in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

TSCA : On TSCA Inventory

## Inventories

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

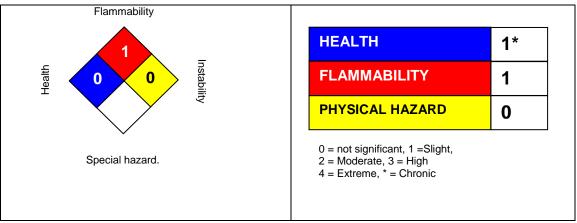
#### **SECTION 16. OTHER INFORMATION**

**Further information** 

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|-------|-----------|

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NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

#### **Full text of H-Statements**

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H360 May damage fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure

if swallowed.

Sources of key data used to compile the Safety Data Sheet Valvoline internal data including own and sponsored test reports The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

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

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

ACGIH: American Conference of Industrial Hygienists

BEI: Biological Exposure Index

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

CMR: Carcinogenic, Mutagenic or Toxic for Reproduction

FG: Food grade

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

H-statement : Hazard Statement

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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

OEL : Occupational Exposure Limit
P-Statement : Precautionary Statement
PBT : Persistent , Bioaccumulative and Toxic

PPE: Personal Protective Equipment STEL: Short-term exposure limit STOT: Specific Target Organ Toxicity

TLV: Threshold Limit Value TWA: Time-weighted average

vPvB: Very Persistent and Very Bioaccumulative

WEL: Workplace Exposure Level

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act

**DOT**: Department of Transportation

FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act HMIRC: Hazardous Materials Information Review Commission

HMIS : Hazardous Materials Identification System

NFPA: National Fire Protection Association

NIOSH: National Institute for Occupational Safety and Health OSHA: Occupational Safety and Health Administration

PMRA: Health Canada Pest Management Regulatory Agency

RTK: Right to Know

WHMIS: Workplace Hazardous Materials Information System