

Safety Data Sheet

DOWTHERM SR-1

Version 1.4

Revision Date: 11/22/2022

SECTION 1. IDENTIFICATION

Product name : DOWTHERM SR-1

Synonyms : No data available

Restricted Uses : No data available

Manufacturer or supplier's details

Company : Univar Solutions Canada Ltd.
Address : 64 Arrow Road
 North York, ON, M9M 2L9
 Canada

Emergency telephone number:

Local Emergency Contact : During Office hours Monday-Friday, 8.00 am - 4.30 pm (Pacific Standard Time) : 1-866-686-4827

Additional Information: : Responsible Party: Product Compliance Department
 E-mail: SDSNA@univarsolutions.com
 SDS Requests: 1-855-429-2661
 Website: www.univarsolutions.com

SECTION 2. HAZARD IDENTIFICATION

Hazardous Classification of the substance or mixture

Acute toxicity (Oral) : Category 4

Reproductive toxicity : Category 2

Specific target organ toxicity
 - repeated exposure : Category 2 (Kidney)

Label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : H302 Harmful if swallowed.
 H361 Suspected of damaging fertility or the unborn child.
 H373 May cause damage to organs (Kidney) through prolonged or repeated exposure.

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.
 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/

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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

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 1.9999 %

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

CAS-No.	Chemical name	% by Weight	Synonyms
107-21-1	Ethylene glycol	80 - 100	ethane-1,2-diol
7758-11-4	Potassium hydrogen phosphate	1 - 3	Potassium hydrogen phosphate
64665-57-2	Sodium tolyltriazole	0.1 - 0.25	Sodium tolyltriazole

Actual concentration or concentration range is withheld as a trade secret

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.
- 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.
Do not induce vomiting without medical advice.

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SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Fog
Dry chemical
Carbon dioxide (CO₂)
Foam
Alcohol-resistant foam
- Unsuitable extinguishing media : High volume water jet
- Hazardous combustion products : Carbon oxides
- Further information : Standard procedure for chemical fires.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- 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.

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Advice on safe handling : Do not breathe vapours/dust.
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.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Electrical installations / working materials must comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

CAS-No.	Components	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis

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107-21-1	Ethylene glycol	(c)	100 mg/m3	CA AB OEL
		TLV-C	50 ppm	CA BC OEL
		TLV-C	100 mg/m3	CA BC OEL
		C	50 ppm 127 mg/m3	CA QC OEL
		TWA	10 mg/m3	CA BC OEL
		STEL	20 mg/m3	CA BC OEL
		TWA (particulate)	10 mg/m3	CA BC OEL
		STEL (particulate)	20 mg/m3	CA BC OEL
		C (aerosol)	100 mg/m3	CA BC OEL
		C (Vapour)	50 ppm	CA BC OEL
		C (Vapour and mist)	50 ppm 127 mg/m3	CA QC OEL

Personal protective equipment

Hand protection

- | | | |
|--------------------------|---|---|
| Remarks | : | The suitability for a specific workplace should be discussed with the producers of the protective gloves. |
| Eye protection | : | Eye wash bottle with pure water
Tightly fitting safety goggles |
| Skin and body protection | : | Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place. |
| Hygiene measures | : | When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday. |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- | | | |
|---|---|--|
| Appearance | : | liquid |
| Colour | : | pink |
| Odour | : | characteristic |
| Odour Threshold | : | No data available |
| pH | : | 9.5 @ 50 % @ 20 °C (68 °F) |
| Freezing Point (Freezing Point) | : | -19.4 °C (-2.9 °F) |
| Boiling Point (Boiling point/boiling range) | : | 158 °C (316 °F)
(1013 hPa) |
| Flash point | : | 126.7 °C (260.1 °F)
Method: Pensky-Martens closed cup |
| Evaporation rate | : | < 0.5
butyl acetate=1 |
| Flammability (solid, gas) | : | No data available |
| Upper explosion limit | : | No data available |
| Lower explosion limit | : | 3.2 %(V) |

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Vapour pressure	: 2.2 mmHg
Relative vapour density	: > 1
Relative density	: 1.1295 @ 20 °C (68 °F)
	Reference substance: (water = 1)
Density	: 9.9960 lb/gal
Water solubility	: No data available
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity	
Viscosity, kinematic	: 14 mm ² /s

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No decomposition if stored and applied as directed.
Conditions to avoid	: elevated temperatures
Incompatible materials	: Aldehydes Strong acids Strong bases Strong oxidizing agents Aluminium
Hazardous decomposition products	: Aldehydes Alcohols ethers

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate: 523.01 mg/kg

Components:

107-21-1:

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

7758-11-4:

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

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

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64665-57-2:

Acute oral toxicity : LD50 (Rat, female): 640 mg/kg

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : LD50 (Rabbit): >2000

Skin corrosion/irritation**Components:****7758-11-4:**

Species: Rabbit

Exposure time: 24 h

Result: Mild skin irritation

64665-57-2:

Species: Rabbit

Exposure time: 4 h

Result: Causes burns.

Serious eye damage/eye irritation**Components:****7758-11-4:**

Remarks: No data available

64665-57-2:

Species: Rabbit

Result: Risk of serious damage to eyes.

Respiratory or skin sensitisation**Components:****7758-11-4:**

Test Type: lymph node assay

Species: Mouse

Result: Did not cause sensitisation on laboratory animals.

Remarks: Based on a similar product formulation.

64665-57-2:

Remarks: No data available

Germ cell mutagenicity**Components:****7758-11-4:**

Genotoxicity in vitro

: Test Type: Ames test

Metabolic activation: with and without metabolic activation

Result: negative

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

Germ cell mutagenicity -

: Tests on bacterial or mammalian cell cultures did not show

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Assessment mutagenic effects.

64665-57-2:

Genotoxicity in vitro

: Test Type: Ames test
Species: Salmonella typhimurium
Result: negative

Genotoxicity in vivo

: Test Type: In vivo micronucleus test
Species: Mouse
Result: negative

Germ cell mutagenicity -
Assessment

: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Carcinogenicity

Components:

7758-11-4:

Remarks: This information is not available.

Carcinogenicity - Assessment

: No evidence of carcinogenicity in animal studies.

64665-57-2:

Carcinogenicity - Assessment

: Carcinogenicity classification not possible from current data.

ACGIH

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

Reproductive toxicity

Product:

Reproductive toxicity - Assessment

Some evidence of adverse effects on sexual function and fertility, based on animal experiments.

Components:

7758-11-4:

Effects on fertility

: Test Type: Screening test
Species: Rat, male and female
Application Route: Oral
Dose: 0, 1000 mg/kg bw
General Toxicity - Parent: NOAEL: 1,000 mg/kg body weight
General Toxicity F1: NOAEL: 1,000 mg/kg body weight
Fertility: NOAEL: 1,000 mg/kg body weight

Effects on foetal development

: Species: Mouse
Application Route: Oral
Dose: 0, 3.2, 14.8, 68.9, 320 mg/kg
Duration of Single Treatment: 10 d
General Toxicity Maternal: NOAEL: > 320 mg/kg body weight
Developmental Toxicity: NOAEL: > 320 mg/kg body weight
Remarks: Information given is based on data obtained from

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similar substances.

Teratogenicity - Assessment : No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

64665-57-2:

Reproductive toxicity - Assessment

Some evidence of adverse effects on sexual function and fertility, based on animal experiments.

Teratogenicity - Assessment : teratogenicity classification is not possible

STOT - repeated exposure

Components:

107-21-1:

Target Organs: Kidney

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

Aspiration toxicity

Components:

7758-11-4:

No aspiration toxicity classification

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

7758-11-4:

Toxicity to fish

: LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l
Exposure time: 96 h
Test Type: semi-static test
Test substance: Phosphoric acid, potassium salt (2:3), dihydrate
Remarks: Information given is based on data obtained from similar substances.

Toxicity to daphnia and other aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): 100 mg/l
Exposure time: 48 h
Test Type: static test

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Test substance: Phosphoric acid, potassium salt (2:3), dihydrate

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

Toxicity to algae : EC50 (*Desmodesmus subspicatus* (green algae)): 100 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Test substance: Phosphoric acid, potassium salt (2:3), dihydrate

64665-57-2:

Toxicity to fish : LC50 (*Cyprinus carpio* (Carp)): 55 mg/l
Exposure time: 96 h
Test substance: Information given is based on data obtained from similar substances.

Toxicity to daphnia and other aquatic invertebrates : EC50 (*Daphnia galeata* (water flea)): 15.8 mg/l
Exposure time: 48 h
Test Type: static test
Test substance: Information given is based on data obtained from similar substances.

Toxicity to algae : EC50 (*Skeletonema costatum* (marine diatom)): 53 mg/l
Exposure time: 72 h

Acute aquatic toxicity- Assessment : Toxic to aquatic life.

Chronic aquatic toxicity- Assessment : Toxic to aquatic life with long lasting effects.

Persistence and degradability

Components:

7758-11-4:

Biodegradability : Remarks: No data available

64665-57-2:

Biodegradability : aerobic

Bioaccumulative potential

Components:

64665-57-2:

Partition coefficient: n-octanol/water : log Pow: 1.083 - 1.091 (25 °C)
pH: 5 - 6

Mobility in soil

No data available

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Other adverse effects**Product:**

Additional ecological information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : 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.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION**TDG (Transportation of Dangerous Goods):** Not regulated as a dangerous good**IATA (International Air Transport Association):** Not regulated as a dangerous good**IMDG-Code:** Not regulated as a dangerous good**SECTION 15. REGULATORY INFORMATION**

This product has been classified according to the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all of the information required by the HPR.

NPRI Components : 107-21-1**The components of this product are reported in the following inventories:**

TSCA : On TSCA Inventory

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

AICS : not determined

NZIoC : not determined

ENCS : not determined

KECI : not determined

PICCS : not determined

IECSC : not determined

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SECTION 16. OTHER INFORMATION

The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. 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 Univar Solutions EHS Product Compliance Department (1-855-429-2661) SDSNA@univarsolutions.com.

Revision Date : 11/22/2022

Material number:

16177856, 16174597, 16176957, 16170818, 16169509, 16168820

Key or legend to abbreviations and acronyms used in the safety data sheet			
ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials

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<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50		Lethal Concentration 50%	