



SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation of the mixture	Dowtherm SR-1 50%
Registration number	-
Synonyms	None.
SDS number	To be determined.
Product code	To be determined.
Issue date	12-January-2017
Version number	01
Revision date	-
Supersedes date	-

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

Identified uses	Industrial use.
Uses advised against	None known.

1.3. Details of the supplier of the safety data sheet

Company name	TSO3 inc.
Address	2505 avenue Dalton Québec (QC), Canada G1P 3S5
Telephone	1-866-715-0003
e-mail	customerservice@tso3.com
Contact person	Customer Service

1.4. Emergency telephone number

613-996-6666

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards

Acute toxicity, oral	Category 4	H302 - Harmful if swallowed.
Specific target organ toxicity - repeated exposure (oral)	Category 2 (kidney)	H373 - May cause damage to organs (kidney) through prolonged or repeated exposure by ingestion.

Hazard summary Harmful if swallowed. May cause damage to organs through prolonged or repeated exposure. Occupational exposure to the substance or mixture may cause adverse health effects.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: Ethylene glycol

Hazard pictograms



Signal word Warning

Hazard statements

H302	Harmful if swallowed.
H373	May cause damage to organs (kidney) through prolonged or repeated exposure by ingestion.

Precautionary statements

Prevention

P260	Do not breathe mist or vapour.
P264	Wash thoroughly after handling.

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

Response

P301 + P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
P330 Rinse mouth.

Storage Store away from incompatible materials.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information None.

2.3. Other hazards Not a PBT or vPvB substance or mixture.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
Ethylene glycol	30 - 60	107-21-1 203-473-3	-	603-027-00-1	#
Classification:	Acute Tox. 4;H302, STOT RE 2;H373				
Other components below reportable levels	40 - 70				

List of abbreviations and symbols that may be used above

#: This substance has been assigned Union workplace exposure limit(s).

Composition comments The full text for all H-statements is displayed in section 16.
All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

SECTION 4: First aid measures

General information If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

4.1. Description of first aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact Rinse with water. Get medical attention if irritation develops and persists.
Ingestion Call a physician or poison control centre immediately. Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

4.2. Most important symptoms and effects, both acute and delayed Nausea. Prolonged exposure may cause chronic effects. Ingestion of ethylene glycol may result in nausea, vomiting, abdominal cramps, blindness, liver damage, irritation, reproductive effects, nerve damage, convulsions, oedema of the lung, cardiopulmonary effects (metabolic acidosis), pneumonia and kidney failure which could result in death. The single lethal dose for humans is about 100 ml. Inhalation of high levels of vapour or mists for prolonged periods of time may also result in toxic effects.

4.3. Indication of any immediate medical attention and special treatment needed This product contains ethylene and/or diethylene glycol which, if ingested, is metabolised to toxic metabolites by the enzyme alcohol dehydrogenase, for which ethanol and 4-methylpyrazole {US drug name Fomepizole, trade name Antizol} are antagonists. Administration of oral or intravenous ethanol or intravenous 4-methylpyrazole may arrest further metabolism of this material and thereby ameliorate the toxicity. Use of ethanol or 4-methylpyrazole does not affect toxic metabolites that are already present and is not a substitute for haemodialysis.

SECTION 5: Firefighting measures

General fire hazards The product is not flammable. However: Will burn if involved in a fire. No unusual fire or explosion hazards noted.

5.1. Extinguishing media

Suitable extinguishing media Alcohol resistant foam. Powder. Carbon dioxide (CO2).
Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Special fire fighting procedures

Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****For non-emergency personnel**

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapour. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

For emergency responders

Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

This product is miscible in water.

Stop the flow of material, if this is without risk. Absorb in vermiculite, dry sand or earth and place into containers. Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

6.4. Reference to other sections

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Do not breathe mist or vapour. Do not taste or swallow. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see section 10 of the SDS).

7.3. Specific end use(s)

Industrial use.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Occupational exposure limits****Austria. MAK List**

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	Ceiling	52 mg/m3
	MAK	20 ppm
		26 mg/m3 10 ppm

Belgium. Exposure Limit Values.

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m3	Aerosol
	TWA	40 ppm	Aerosol
		52 mg/m3 20 ppm	Aerosol Aerosol

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m3
	TWA	40 ppm
		52 mg/m3 20 ppm

Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	MAC	52 mg/m3
	STEL	20 ppm
		104 mg/m3 40 ppm

Czech Republic. OELs. Government Decree 361

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	Ceiling	100 mg/m ³
	TWA	50 mg/m ³

Denmark. Exposure Limit Values

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	TLV	26 mg/m ³	
		10 mg/m ³	Aerosol
		10 ppm	

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m ³
		40 ppm
		52 mg/m ³ 20 ppm

Finland. Workplace Exposure Limits

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	STEL	100 mg/m ³
		40 ppm
		50 mg/m ³ 20 ppm

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	VLE	104 mg/m ³	Vapour.
		40 ppm	Vapour.
		52 mg/m ³ 20 ppm	Vapour.

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	TWA	26 mg/m ³	Vapor and aerosol.
		10 ppm	Vapor and aerosol.

Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	AGW	26 mg/m ³	Vapor and aerosol.
		10 ppm	Vapor and aerosol.

Greece. OELs (Decree No. 90/1999, as amended)

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	STEL	125 mg/m ³	Vapour.
		50 ppm	Vapour.
		125 mg/m ³ 50 ppm	Vapour.

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m ³
	TWA	52 mg/m ³

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m ³	
	TWA	40 ppm	
		26 mg/m ³	Mist.
		26 mg/m ³	
		10 ppm	
		10 ppm	Mist.

Ireland. Occupational Exposure Limits

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m ³	Vapour.
	TWA	40 ppm	Vapour.
		52 mg/m ³	Vapour.
		10 mg/m ³	Particulate.
		20 ppm	Vapour.

Italy. OELs

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m ³
	TWA	40 ppm
		52 mg/m ³
		20 ppm

Latvia. OELs. Occupational exposure limit values of chemical substances in work environment

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m ³
	TWA	40 ppm
		52 mg/m ³
		20 ppm

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements (Hygiene Norm HN 23:2007)

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	STEL	50 mg/m ³
	TWA	20 ppm
		25 mg/m ³
		10 ppm

Luxembourg. Binding Occupational exposure limit values (Annex I), Memorial A

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m ³
	TWA	40 ppm
		52 mg/m ³
		20 ppm

Malta. OELs. Occupational Exposure Limit Values (L.N. 227. of Occupational Health and Safety Authority Act (CAP. 424), Schedules I and V)

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m ³
	TWA	40 ppm
		52 mg/m ³
		20 ppm

Netherlands. OELs (binding)

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m ³	Vapour.

Netherlands. OELs (binding)

Components	Type	Value	Form
	TWA	52 mg/m3	Vapour.
		10 mg/m3	Mist.

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m3
	TLV	40 ppm
		52 mg/m3
		20 ppm

Poland. MACs. Regulation regarding maximum permissible concentrations and intensities of harmful factors in the work environment, Annex 1

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	STEL	50 mg/m3
	TWA	15 mg/m3

Portugal. OELs. Decree-Law n. 290/2001 (Journal of the Republic - 1 Series A, n.266)

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m3
	TWA	40 ppm
		52 mg/m3
		20 ppm

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	Ceiling	100 mg/m3	Aerosol

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m3
	TWA	40 ppm
		52 mg/m3
		20 ppm

Slovakia. OELs. Decree of the government of the Slovak Republic concerning protection of health in work with chemical agents

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	TWA	52 mg/m3
		20 ppm

Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m3
		40 ppm

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	TWA	52 mg/m3
		20 ppm

Spain. Occupational Exposure Limits

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m3

Spain. Occupational Exposure Limits

Components	Type	Value
	TWA	40 ppm 52 mg/m ³ 20 ppm

Sweden. OELs. Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2015:7)

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	Ceiling	104 mg/m ³
	TWA	40 ppm 25 mg/m ³ 10 ppm

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	STEL	52 mg/m ³
	TWA	20 ppm 26 mg/m ³ 10 ppm

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m ³	Vapour.
	TWA	40 ppm 52 mg/m ³ 10 mg/m ³ 20 ppm	Vapour. Vapour. Particulate. Vapour.

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU

Components	Type	Value
Ethylene glycol (CAS 107-21-1)	STEL	104 mg/m ³
	TWA	40 ppm 52 mg/m ³ 20 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no effect levels (DNELs) Not available.

Predicted no effect concentrations (PNECs) Not available.

Exposure guidelines

EU Exposure Limit Values: Skin designation

Ethylene glycol (CAS 107-21-1)

Can be absorbed through the skin.

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

Ethylene glycol (CAS 107-21-1)

Can be absorbed through the skin.

8.2. Exposure controls

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

General information

Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin protection

- Hand protection

Wear appropriate chemical resistant gloves. Nitrile gloves are recommended.

- Other	Use of an impervious apron is recommended.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Use respiratory equipment with combination filter, type A2/P2.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
Hygiene measures	Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
Environmental exposure controls	Environmental manager must be informed of all major releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state	Liquid.
Form	Liquid.
Colour	Pink.
Odour	Characteristic.
Odour threshold	Not available.
pH	9,5
Melting point/freezing point	-19,4 °C (-2,92 °F) at 101,3 kPa
Initial boiling point and boiling range	158 °C (316,4 °F) at 101,3 kPa
Flash point	126,0 °C (258,8 °F) Closed cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	3,2 % v/v at 20 °C
Flammability limit - upper (%)	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	1,06 at 20 °C
Solubility(ies)	100 % at 20 °C
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	427 °C (800,6 °F)
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
9.2. Other information	No relevant additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Contact with incompatible materials.
10.5. Incompatible materials	Strong oxidising agents. Strong bases. Strong acids.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.

SECTION 11: Toxicological information

General information	Occupational exposure to the substance or mixture may cause adverse effects.
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Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful. Prolonged or repeated inhalation may cause respiratory tract irritation.
Skin contact	Prolonged skin contact may cause temporary irritation.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Harmful if swallowed. May cause damage to organs through prolonged or repeated exposure by ingestion. May cause damage to the kidneys.

Symptoms

Nausea. Ingestion of ethylene glycol may result in nausea, vomiting, abdominal cramps, blindness, liver damage, irritation, reproductive effects, nerve damage, convulsions, oedema of the lung, cardiopulmonary effects (metabolic acidosis), pneumonia and kidney failure which could result in death. The single lethal dose for humans is about 100 ml. Inhalation of high levels of vapour or mists for prolonged periods of time may also result in toxic effects.

11.1. Information on toxicological effects

Acute toxicity Harmful if swallowed.

Components	Species	Test results
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Ethylene glycol (CAS 107-21-1)

Acute

Dermal

LD50	Rabbit	9530 mg/kg
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Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation Based on available data, the classification criteria are not met.

Respiratory sensitisation Due to partial or complete lack of data the classification is not possible.

Skin sensitisation Based on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Not classifiable as to carcinogenicity to humans.

Reproductive toxicity Based on available data, the classification criteria are not met.

Specific target organ toxicity - single exposure Based on available data, the classification criteria are not met.

Specific target organ toxicity - repeated exposure May cause damage to organs (kidney) through prolonged or repeated exposure by ingestion.

Aspiration hazard Not an aspiration hazard.

Mixture versus substance information No information available.

Other information Symptoms may be delayed.

SECTION 12: Ecological information

12.1. Toxicity Based on available data, the classification criteria are not met for hazardous to the aquatic environment.

Components	Species	Test results
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Ethylene glycol (CAS 107-21-1)

Aquatic

Acute

Crustacea	EC50	Ceriodaphnia dubia	10000 mg/l, 48 Hours
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Fish	LC50	Oncorhynchus mykiss	24591 mg/l, 96 Hours
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Chronic

Crustacea	NOEC	Ceriodaphnia dubia	3469 mg/l, 7 days
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Fish	NOEC	Oncorhynchus mykiss	14692 mg/l, 12 days
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12.2. Persistence and degradability The organic components of the product are biodegradable.

12.3. Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Partition coefficient

n-octanol/water (log Kow)

Ethylene glycol (CAS 107-21-1)	-1,36
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Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil This product is water soluble and may disperse in soil.

12.5. Results of PBT and vPvB assessment Not a PBT or vPvB substance or mixture.

12.6. Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

EU waste code The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Disposal methods/information Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14: Transport information

ADR

14.1. - 14.6.: Not regulated as dangerous goods.

RID

14.1. - 14.6.: Not regulated as dangerous goods.

ADN

14.1. - 14.6.: Not regulated as dangerous goods.

IATA

14.1. - 14.6.: Not regulated as dangerous goods.

IMDG

14.1. - 14.6.: Not regulated as dangerous goods.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code This substance/mixture is not intended to be transported in bulk.

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended
Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended
Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended
Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended
Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended
Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended
Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended
Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA
Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended
Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended
Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.
Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Not listed.

Other regulations

This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended. The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended.

National regulations

Follow national regulation for work with chemical agents.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

PBT: Persistent, bioaccumulative and toxic.
vPvB: Very Persistent and very Bioaccumulative.
LD50: Lethal Dose, 50%.
LC50: Lethal Concentration, 50%.
ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways.
ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road.
IATA: International Air Transport Association.
IMDG Code: International Maritime Dangerous Goods Code.
MARPOL: International Convention for the Prevention of Pollution from Ships.
EC50: Effective Concentration, 50%.
NOEC: No observed effect concentration.

References

HSDB® - Hazardous Substances Data Bank
IARC Monographs. Overall Evaluation of Carcinogenicity

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any H-statements not written out in full under Sections 2 to 15

H302 Harmful if swallowed.
H373 May cause damage to organs through prolonged or repeated exposure by ingestion.

Training information

Follow training instructions when handling this material.

Disclaimer

TSO3 inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.