

TERSPERSE® 2500

Version 1.4 Revision Date: 09/12/2022 SDS Number: 400041003317 Date of last issue: 08/29/2022
 Date of first issue: 02/10/2022

Print Date 09/27/2022

SECTION 1. IDENTIFICATION

Product name : TERSPERSE® 2500

Manufacturer or supplier's details

Company name of supplier : Indorama Ventures Oxides LLC
 Address : 24 Waterway Ave., Suite 1100, The Woodlands, Texas 77380
 United States of America (USA)
 Telephone : (256) 3405200

E-mail address of person responsible for the SDS : oxide.sds.global@indorama.net
 Emergency telephone number : CHEMTREC – United States (English)
 Local (City) Northern Virginia: +1 703-741-5970

Recommended use of the chemical and restrictions on use

Recommended use : Dispersing agent

SECTION 2. HAZARDS IDENTIFICATION**GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)**

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Other hazards

None known.

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

Chemical name	CAS-No.	Concentration (% w/w)
propane-1,2-diol	57-55-6	>= 20 - < 30

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

General advice : Treat symptomatically.
 Get medical attention if symptoms occur.
 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 skin contact : Get medical attention if irritation develops and persists.

In case of eye contact : Remove contact lenses.
 Protect unharmed eye.
 If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.
 Do not give milk or alcoholic beverages.

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Never give anything by mouth to an unconscious person.
 If symptoms persist, call a physician.

Most important symptoms and effects, both acute and delayed : None known.

Protection of first-aiders : No special precautions are necessary for first aid responders. No action shall be taken involving any personal risk or without suitable training.

Notes to physician : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Water spray
 Alcohol-resistant foam
 Carbon dioxide (CO₂)
 Dry chemical

Unsuitable extinguishing media : Exercise caution when using a high volume water jet as it may scatter and spread fire

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 fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.

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

Methods and materials for containment and cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).
 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 : Avoid formation of respirable particles.
 Do not breathe vapours or spray mist.
 Avoid contact with skin and eyes.
 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 : Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : For incompatible materials please refer to Section 10 of this SDS.

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No materials to be especially mentioned.

Further information on storage stability : Stable under normal conditions.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Ingredients with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
propane-1,2-diol	57-55-6	TWA	10 mg/m3	US WEEL

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Hand protection

Remarks : Impervious gloves The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Safety glasses

Skin and body protection : Protective suit

Hygiene measures : General industrial hygiene practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Color : red brown

Odor : characteristic

Odor Threshold : No data available

pH : 3.5 - 6
Concentration: 10 g/l

Melting point/freezing point : No data available

Boiling point : 212 °F / 100 °C

Flash point : > 212 °F / > 100 °C
Method: closed cup

Evaporation rate : No data available

Self-ignition : No data available

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

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Vapor pressure : No data available
Relative vapor density : No data available
Relative density : No data available
Density : 1.07 g/cm³ (68 °F / 20 °C)
Bulk density : No data available
Solubility(ies)
 Water solubility : soluble in cold water
 Solubility in other solvents : Solvent: Methanol
 Description: partly soluble
Partition coefficient: n-octanol/water : No data available
Autoignition temperature : No data available
Decomposition temperature : No data available
Viscosity
 Viscosity, dynamic : 200 mPa.s (77 °F / 25 °C)
 Viscosity, kinematic : 185 mm²/s (77 °F / 25 °C)
Explosive properties : No data available
Oxidizing properties : No data available
Self-heating substances : No data available
Heat of combustion : No data available
Molecular weight : No data available
Minimum ignition energy : No data available

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 : Stable under recommended storage conditions.
No hazards to be specially mentioned.
Conditions to avoid : No data available
Incompatible materials : None known.
Hazardous decomposition products : No decomposition if stored and applied as directed.

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SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity**

Not classified based on available information.

Product:

Acute oral toxicity : Remarks: No data available

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

Components:**propane-1,2-diol:**

Acute oral toxicity : LD50 (Rat): 22,000 - 31,000 mg/kg
LD50 (Mouse): 25,000 mg/kg
LD50 (Rabbit): 19,000 - 20,000 mg/kg

Acute inhalation toxicity : LC50 (Rabbit): > 317 mg/l
Exposure time: 2 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): 21,000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Product:

Remarks : No data available

Components:**propane-1,2-diol:**

Result : No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks : No data available

Components:**propane-1,2-diol:**

Result : No eye irritation

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Respiratory or skin sensitization
Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Product:

Routes of exposure : Skin
 Remarks : No data available

Routes of exposure : Inhalation
 Remarks : No data available

Components:
propane-1,2-diol:

Routes of exposure : Skin
 Species : Guinea pig
 Result : Does not cause skin sensitization.

Germ cell mutagenicity

Not classified based on available information.

Product:

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

Carcinogenicity

Not classified based on available information.

Product:

Remarks : No data available

Components:
propane-1,2-diol:

Species : Rat
 Application Route : Oral
 Exposure time : 24 month(s)
 Result : negative

IARC No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

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

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Reproductive toxicity

Not classified based on available information.

Product:

Effects on fertility : Remarks: No data available

Effects on fetal development : Remarks: No data available

STOT-single exposure

Not classified based on available information.

Product:

Remarks : No data available

STOT-repeated exposure

Not classified based on available information.

Product:

Remarks : No data available

Repeated dose toxicity**Product:**

Remarks : No data available

Aspiration toxicity

Not classified based on available information.

Further information**Product:**

Remarks : No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Product:**Toxicity to fish : LC50: 2,120 mg/l
Exposure time: 96 hToxicity to daphnia and other :
aquatic invertebrates Remarks: No data availableToxicity to algae/aquatic :
plants Remarks: No data availableToxicity to daphnia and other : Remarks: No data available
aquatic invertebrates (Chron-
ic toxicity)

Toxicity to microorganisms : Remarks: No data available

Toxicity to soil dwelling or- : Remarks: No data available

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ganisms
Plant toxicity : Remarks: No data available

Sediment toxicity : Remarks: No data available

Ecotoxicology Assessment

Acute aquatic toxicity : No data available
Remarks: No data available

Chronic aquatic toxicity : No data available
Remarks: No data available

Components:

propane-1,2-diol:

Toxicity to fish : LC50: 23,800 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia dubia (water flea)): 18,340 mg/l
Exposure time: 48 h
Test substance: Fresh water

EC50 (Daphnia dubia (water flea)): 34,400 mg/l
Exposure time: 48 h
Test substance: Fresh water
Remarks: Toxic to aquatic organisms.

Toxicity to algae/aquatic plants : EC50: 19,000 mg/l
Exposure time: 72 h
Test substance: Fresh water
Remarks: Toxic to aquatic organisms.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia (water flea)): 13,020 mg/l
Exposure time: 7 d
Test substance: Fresh water

Persistence and degradability

Product:

Biodegradability : Result: Not readily biodegradable.
Biodegradation: 38 %
Exposure time: 28 d
Method: OECD Test Guideline 301F

Components:

propane-1,2-diol:

Biodegradability : Result: Readily biodegradable.
Biodegradation: > 70 %
Exposure time: 28 d
Method: OECD Test Guideline 301E

Biochemical Oxygen Demand (BOD) : 860 mg/g

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Chemical Oxygen Demand (COD) : 1,585 mg/g

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

Components:

propane-1,2-diol:

Bioaccumulation : Bioconcentration factor (BCF): 0.09
Remarks: Does not bioaccumulate.

Partition coefficient: n-octanol/water : log Pow: -0.92 - -0.3

Mobility in soil

Product:

Stability in soil : Remarks: No data available

Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of contents and container in accordance with all local, regional, national and international regulations.
Do not dispose of waste into sewer.
Do not contaminate ponds, waterways or ditches with chemical or used container.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

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57-55-6

propane-1,2-diol

Maine Chemicals of High Concern

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

Product does not contain any listed chemicals

Washington Chemicals of High Concern

Product does not contain any listed chemicals

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

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

TSCA : On or in compliance with the active portion of the TSCA inventory

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

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

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

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

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

PICCS : Not in compliance with the inventory

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

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

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION**Further information**

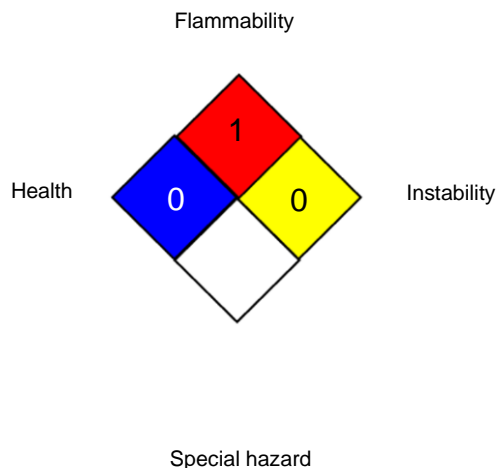
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NFPA 704:



HMIS® IV:

HEALTH	/	0
FLAMMABILITY		1
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

US WEEL : USA. Workplace Environmental Exposure Levels (WEEL)
 US WEEL / TWA : 8-hr TWA

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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