

SAFETY DATA SHEET

1. Identification

Product identifier: TEGO® Wet 296

Chemical name: polyether siloxane

Other means of identification

Recommended use: Industrial use

Recommended restrictions: None known.

Manufacturer/Importer/Distributor Information

Company Name : Evonik Australia Pty Ltd
Suites 33&37
1 Ricketts Road
Mt Waverley, VIC 3149
Australia

Telephone : +61 3 8581 8400

Fax : +61 3 9544 5002

E-mail : productsafety-cs@evonik.com

Emergency telephone number:

24-Hour Health : +61 2 9037 2994

Emergency : +1 703 527 3887 (CHEMTREC WORLD)

2. Hazard(s) identification

Classification according to GHS

Physical Hazards

Flammable liquids Category 4

Health Hazards

Acute toxicity (Oral) Category 5

Acute toxicity (Inhalation - dust and mist) Category 4

Skin Corrosion/Irritation Category 3

Environmental Hazards

Acute hazards to the aquatic environment Category 3

Chronic hazards to the aquatic environment

Category 3

Label Elements

Hazard Symbol:



Signal Word: Warning

Hazard Statement: Combustible liquid.
Harmful if inhaled.
May be harmful if swallowed.
Causes mild skin irritation.
Harmful to aquatic life with long lasting effects.

Precautionary Statements

Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response: Call a POISON CENTER or doctor/ physician if you feel unwell. If skin irritation occurs: Get medical advice/attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage: Store in a well-ventilated place.

Disposal: Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

Other hazards: None known.

3. Composition/information on ingredients

Chemical name:
polyether siloxane

Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethoxylated	No data available.	68937-54-2	30 - 60%
octamethylcyclotetrasiloxane	No data available.	556-67-2	<0.1%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

The exact concentration has been withheld as a trade secret.

4. First-aid measures

Description of necessary first-aid measures

General information:	Immediately remove contaminated clothing.
Inhalation:	If inhaled remove from side of exposure to fresh air, seek medical advice.
Skin Contact:	In case of contact with skin wash off with soap and water. In case of discomfort: Supply with medical care.
Eye contact:	In case of contact with eyes rinse thoroughly with water. In case of discomfort: Supply with medical care.
Ingestion:	Thoroughly clean the mouth with water In case of discomfort: Supply with medical care.
Personal Protection for First-aid Responders:	No data available.

Most important symptoms and effects, both acute and delayed

Symptoms:	Up to now no symptoms are known.
Hazards:	No data available.

Indication of immediate medical attention and special treatment needed

Treatment:	Treat symptomatically.
-------------------	------------------------

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: foam, carbon dioxide, dry powder, water spray.

Unsuitable extinguishing media: High volume water jet.

Special hazards arising from the substance or mixture:

In the event of fire the following can be released: - Carbon monoxide, carbon dioxide, silicon dioxide Under certain conditions of combustion traces of other toxic substances cannot be excluded

Special protective equipment and precautions for firefighters
Special fire fighting procedures:

No specific precautions.

Special protective equipment for fire-fighters:

Do not inhale explosion and/or combustion gases. Self-contained breathing apparatus.

6. Accidental release measures	
---------------------------------------	--

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment.

Accidental release measures:

No data available.

Methods and material for containment and cleaning up:

Take up with absorbent material (eg sand, kieselguhr, universal binder) Dispose of absorbed material in accordance with the regulations.

Environmental Precautions:

Prevent product from getting into subsoil/soil. Do not allow to enter drains or waterways

7. Handling and storage	
--------------------------------	--

Handling
Technical measures (e.g. Local and general ventilation):

No data available.

Safe handling advice:

Provide good ventilation of working area (local exhaust ventilation if necessary). Do not inhale gases/vapours/aerosols. Avoid contact with skin and eyes.

Contact avoidance measures:

No data available.

Storage
Safe storage conditions:

Keep container tightly closed in a cool, well-ventilated place.

Safe packaging materials:

No data available.

8. Exposure controls/personal protection	
---	--

Control Parameters
Occupational Exposure Limits

Observe national threshold limit values.

Biological Limit Values

Observe national threshold limit values.

Appropriate Engineering Controls

No data available.

Individual protection measures, such as personal protective equipment
General information:

No data available.

Eye/face protection:

Safety glasses

Skin Protection
Hand Protection:

 Material: Nitrile rubber.
 Break-through time: 480 min
 Glove thickness: 0.11 mm

Other:

protective clothing

Respiratory Protection:

in case of formation of vapours/aerosols: Short term: filter apparatus, combination filter A-P2

Hygiene measures:

Wash hands before breaks and immediately after handling the product. When using do not eat, drink or smoke. Remove soiled or soaked clothing immediately.

9. Physical and chemical properties
Information on basic physical and chemical properties
Appearance
Physical state:

liquid

Form:

liquid

Color:

Colorless

Odor:

Characteristic

Odor Threshold:

not measured

Freezing point:

< 32 °F/< 0 °C

Boiling Point:

363 °F/184 °C

Flammability:

not measured

Upper/lower limit on flammability or explosive limits
Explosive limit - upper:

not measured

Explosive limit - lower:

not measured

Flash Point:

178 °F/81 °C (DIN EN 22719)

Auto-ignition temperature:

not measured

Decomposition Temperature:

not measured

pH:

7 - 9 (25 °C)

Viscosity
Dynamic viscosity:

5 - 20 mPa.s (77 °F/25 °C, DIN 53019)

Kinematic viscosity:

 4.7 - 19 mm²/s (77 °F/25 °C, calculated)

Flow Time:	No data available.
Solubility(ies)	
Solubility in Water:	partly soluble
Solubility (other):	not measured
Partition coefficient (n-octanol/water):	not measured
Vapor pressure:	not measured
Relative density:	not measured
Density:	0.95 - 1.05 g/cm ³ (77 °F/25 °C) (DIN 51757)
Bulk density:	No data available.
Relative vapor density:	not measured

Other information

Explosive properties:	not measured
Oxidizing properties:	not oxidizing
Minimum ignition temperature:	not measured
Metal Corrosion:	Not corrosive to metals
Evaporation Rate:	not measured

10. Stability and reactivity

Reactivity:	see section "Possibility of hazardous reactions".
Chemical Stability:	The product is stable under normal conditions.
Possibility of hazardous reactions:	No hazardous reactions with proper storage and handling
Conditions to avoid:	None with proper storage and handling.
Incompatible Materials:	Not known.
Hazardous Decomposition Products:	None with proper storage and handling.

11. Toxicological information

Information on toxicological effects

Information on likely routes of exposure

Inhalation:	Information on effects are given below.
Skin Contact:	Information on effects are given below.
Eye contact:	Information on effects are given below.
Ingestion:	Information on effects are given below.

Acute toxicity (list all possible routes of exposure)
Oral

Product: LD 50 (Rat): > 2,000 mg/kg (OECD 423) The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

Components:

Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethoxylated

octamethylcyclotetrasiloxane LD 50 (Rat): > 5,000 mg/kg

Dermal

Product: LD 50 (ATEmix): > 5,000 mg/kg

Components:

Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethoxylated

octamethylcyclotetrasiloxane LD 50 (Rat): > 5,000 mg/kg

Inhalation

Product: LC 50 (ATEmix, 4 h): 2.51 mg/l

Components:

Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethoxylated Vapour, No data available. LC 50 (Rat, 4 h): 1.08 mg/l Dust and mist

octamethylcyclotetrasiloxane LC 50 (Rat, Female, Male, 4 h): 36 mg/l Vapour Dust and mist, No data available.

Repeated dose toxicity

Product: No data available.

Components:

Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethoxylated

octamethylcyclotetrasiloxane NOAEC (Rat(Female, Male), Inhalation(Vapour) , 5 days/weeks, 6 hours/day): 1.8 mg/l Subchronic toxicity

LOAEC (Rat(Female, Male), Inhalation(Vapour) , 5 days/weeks, 6 hours/day): 8.5 mg/l chronic

NOAEC (Rat(Female, Male), Inhalation(Vapour) , 5 days/weeks, 6 hours/day): 0.36 mg/l Subacute toxicity

Skin Corrosion/Irritation

Slightly irritating.

Product:

OECD 404 (Rabbit): Slightly irritating.; The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

Components:

Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethoxylated OECD 404 (Rabbit): Slightly irritating.

octamethylcyclotetrasiloxane OECD 404 (Rabbit): Not irritating

Serious Eye Damage/Eye Irritation

Not irritating

Product: OECD 405 (Rabbit): Not irritating; The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

Components:
 Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethoxylated OECD 405 (Rabbit): Not irritating

octamethylcyclotetrasiloxane OECD 405 (Rabbit): Not irritating

Respiratory or Skin Sensitization

Not a skin sensitizer.

Product: Sensitization test (Guinea Pig): Not a skin sensitizer. The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

Components:
 Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethoxylated Sensitization test (Guinea Pig): Not a skin sensitizer.

octamethylcyclotetrasiloxane Magnussona i Kligmana., OECD 406 (Rabbit): Not a skin sensitizer.
 Sensitization test (Human): Not a skin sensitizer.
 Maximization Test, OECD 406 (Guinea Pig): Not a skin sensitizer.

Carcinogenicity

Product: No data available.

Components:
 Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethoxylated No data available.

octamethylcyclotetrasiloxane No data available.

Germ Cell Mutagenicity

No data available.

In vitro

Product: No data available.

Components:
 Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethoxylated No data available.

octamethylcyclotetrasiloxane Ames test (OECD 471): negative
 Chromosomal aberration (OECD 473): negative
 gene mutation test (OECD 476): negative

In vivo

Product: No data available.

Components:

Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethoxylated octamethylcyclotetrasilox ane	No data available. Micronucleus test (OECD 474) Inhalation - vapor (Rat): negative Chromosomal aberration (OECD 478) Oral (Rat): negative Chromosomal aberration (OECD 475) Inhalation - vapor (Rat, Female, Male): negative
---	--

Reproductive toxicity

Product: No data available.

Components:
 Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethoxylated

No data available.

octamethylcyclotetrasilox ane Suspected of damaging fertility or the unborn child. Suspected of damaging fertility.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Components:
 Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethoxylated

No data available.

octamethylcyclotetrasilox ane No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Components:
 Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethoxylated

No data available.

octamethylcyclotetrasilox ane No data available.

Aspiration Hazard

Product: Not classified

Components:
 Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethoxylated

Not classified

octamethylcyclotetrasilox ane Not classified

Information on health hazards
Other hazards

Product: No data available.

12. Ecological information
Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: LC 50 (Danio rerio, 96 h): 18.1 mg/l The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

Components:

Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethoxylated LC 50 (Danio rerio, 96 h): 18.1 mg/l

octamethylcyclotetrasiloxane LC 50 (Oncorhynchus mykiss, 96 h): > 22 µg/l
 NOEC (Oncorhynchus mykiss, 96 h): 22 µg/l

Aquatic Invertebrates

Product: EC 50 (Daphnia magna, 48 h): 28.3 mg/l The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

Components:

Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethoxylated EC 50 (Daphnia magna, 48 h): 28.3 mg/l

octamethylcyclotetrasiloxane NOEC (Daphnia magna, 48 h): 15 µg/l
 EC 50 (Daphnia magna, 48 h): > 15 µg/l

Toxicity to Aquatic Plants

Product: EC 50 (Desmodesmus subspicatus (green algae), 72 h): 28.2 mg/l The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).
 EC 50 (Desmodesmus subspicatus (green algae), 72 h): 152.2 mg/l The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

Components:

Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethoxylated EC 50 (Desmodesmus subspicatus (green algae), 72 h): 28.2 mg/l
 EC 50 (Desmodesmus subspicatus (green algae), 72 h): 152.2 mg/l

octamethylcyclotetrasiloxane EC 50 (Algae (Pseudokirchneriella subcapitata), 96 h): > 22 µg/l (US-EPA-method)
 EC 50 (Algae (Pseudokirchneriella subcapitata), 96 h): > 22 µg/l (US-EPA-method)

Toxicity to microorganisms

Product: No data available.

Components:

Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethoxylated No data available.

octamethylcyclotetrasiloxane No data available.

Toxicity to soil dwelling organisms

Product: No data available.

Components:

Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethoxylated No data available.

octamethylcyclotetrasiloxane No data available.

ane

Toxicity to terrestrial organisms

Product: No data available.

Components:

Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethoxylated

octamethylcyclotetrasiloxane No data available.

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Components:

Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethoxylated

octamethylcyclotetrasiloxane NOEC (Oncorhynchus mykiss, 93 d): 4.4 µg/l (US-EPA-method)

Aquatic Invertebrates

Product: No data available.

Components:

Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethoxylated

octamethylcyclotetrasiloxane NOEC (Daphnia magna, 21 d): 15 µg/l (EPA OTS 797.1330)
 Lowest Observed Effect Concentration (Daphnia magna, 21 d): 15 µg/l (EPA OTS 797.1330)
 EC 50 (Daphnia magna, 21 d): > 15 µg/l (EPA OTS 797.1330)

Toxicity to Aquatic Plants

Product: No data available.

Components:

Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethoxylated

octamethylcyclotetrasiloxane NOEC (Algae (Pseudokirchneriella subcapitata), 96 h): < 22 µg/l (US-EPA-method)

Toxicity to microorganisms

Product: No data available.

Components:

Siloxanes and Silicones, di-Me, 3-hydroxypropyl Me, ethoxylated

octamethylcyclotetrasiloxane No data available.

Toxicity to soil dwelling organisms

Product: No data available.

Components:

Siloxanes and Silicones, di-Me, 3-hydroxypropyl

Me, ethoxylated
octamethylcyclotetrasiloxane No data available.

Toxicity to terrestrial organisms

Product: No data available.

Components:

Siloxanes and Silicones,
di-Me, 3-hydroxypropyl

Me, ethoxylated
octamethylcyclotetrasiloxane No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

Components:

Siloxanes and Silicones,
di-Me, 3-hydroxypropyl
Me, ethoxylated

octamethylcyclotetrasiloxane 3.7 % (28 d, OECD 310) The product is not biodegradable., aerobic

BOD/COD Ratio

Product: No data available.

Components:

Siloxanes and Silicones,
di-Me, 3-hydroxypropyl

Me, ethoxylated
octamethylcyclotetrasiloxane No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Components:

Siloxanes and Silicones,
di-Me, 3-hydroxypropyl

Me, ethoxylated
octamethylcyclotetrasiloxane No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: Log Kow: not measured

Components:

Siloxanes and Silicones,
di-Me, 3-hydroxypropyl

Me, ethoxylated
octamethylcyclotetrasiloxane Log Kow: 6.488 25.1 °C (OECD 123)

Mobility in soil:

Product No data available.

Components:

Siloxanes and Silicones, di-No data available.
 Me, 3-hydroxypropyl Me,
 ethoxylated
 octamethylcyclotetrasiloxanNo data available.

Product No data available.

Components:

Siloxanes and Silicones, di- No data available.
 Me, 3-hydroxypropyl Me,
 ethoxylated
 octamethylcyclotetrasiloxanNo data available.

Other adverse effects:

Other hazards

Product: Do not allow to enter soil, waterways or waste water canal.

13. Disposal considerations

Disposal methods: In accordance with local authority regulations, take to special waste incineration plant

Contaminated Packaging: If empty contaminated containers are recycled or disposed of, the receiver must be informed about possible hazards.

14. Transport information

ADG

Not regulated as a dangerous good

Remarks : FOR USA ONLY: In packagings exceeding 450 L, this product must be classified, placarded, marked and shipped as Combustible Liquid to the USA.

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

Remarks : FOR USA ONLY: In packagings exceeding 450 L, this product must be classified, placarded, marked and shipped as Combustible Liquid to the USA.
 FOR USA ONLY: In packagings > 450 L this Product must be classified, placarded, marked and shipped as Combustible Liquid in the USA.

IMDG-Code

Not regulated as a dangerous good

Remarks : FOR USA ONLY: In packagings exceeding 450 L, this product must be classified, placarded, marked and shipped as

Combustible Liquid to the USA.
FOR USA ONLY: In packagings > 450 L this Product must be classified, placarded, marked and shipped as Combustible Liquid in the USA.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

15. Regulatory information

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

Not applicable

16. Other information, including date of preparation or last revision

Issue Date: 18.04.2023

Version #: 1.0

Further Information: No data available.

Revision Information: Changes since the last version are highlighted in the margin. This version replaces all previous versions.

Disclaimer: This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.