

# SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

## 1. Identification

**Product identifier:** Protectosil® AQUA-TRETE® CONCENTRATE

**Chemical name:**  
AQUA-TRETE® Concentrate

**Other means of identification**

**Recommended restrictions**

**Recommended use:** For industrial use  
**Restrictions on use:** Not known.

**Manufacturer/Importer/Distributor Information**

Company Name : Evonik Corporation  
2 Turner Place  
Piscataway, NJ 08854  
USA

Telephone : +1 732 981 5000

E-mail : product-regulatory-services@evonik.com

**Emergency telephone number:**

24-Hour Health : +1 800 424 9300 (CHEMTREC - US & CANADA)  
Emergency : 800 681 9531 (CHEMTREC MEXICO)  
+1 703 527 3887 (CHEMTREC WORLD)

## 2. Hazard(s) identification

**Hazard Classification**

**Physical Hazards**

Flammable liquids Category 3

**Health Hazards**

Skin irritation Category 2

**Label Elements**

**Hazard Symbol:**



**Signal Word:** Warning

<b>Hazard Statement:</b>	Flammable liquid and vapor. Causes skin irritation.
<b>Precautionary Statements</b>	
<b>Prevention:</b>	Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof [electrical/ventilating/lighting/...] equipment. Use non-sparking tools. Take precautionary measures against static discharge. Wash thoroughly after handling. Wear protective gloves/eye protection/face protection.
<b>Response:</b>	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.
<b>Storage:</b>	Store in a well-ventilated place. Keep cool.
<b>Disposal:</b>	Dispose of contents/ container to an approved waste disposal plant.
<b>Hazard(s) not otherwise classified (HNOC):</b>	None.

### 3. Composition/information on ingredients

**Chemical name:**  
AQUA-TRETE® Concentrate

#### Mixtures

Chemical Identity	CAS number	Content in percent (%) <sup>*</sup>
Trimethoxypropylsilane	1067-25-0	>80 - <100%
methanol	67-56-1	>=0.1 - <1%

<sup>\*</sup> 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

<b>General information:</b>	Remove contaminated or saturated clothing immediately and follow safe disposal procedures.
<b>Inhalation:</b>	If aerosol or mists are inhaled, take affected persons out into the fresh air. In case of persistent discomfort or other symptoms, consult a physician immediately.
<b>Skin Contact:</b>	Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Obtain medical attention immediately if symptoms occur. Wash clothing before reuse.
<b>Eye contact:</b>	Keeping eyelid open, immediately rinse thoroughly for at least 5 minutes using plenty of water or, if necessary, eye rinsing solution. In case of persistent discomfort: Consult an ophthalmologist.

**Ingestion:** If substance is accidentally swallowed, do not induce vomiting. If fully conscious, have patient rinse mouth with plenty of water and drink plenty of water in small sips. If unconscious, ensure person is in a stable position. Never give anything by mouth to an unconscious person. Obtain immediate medical attention.

**Personal Protection for First-aid Responders:** As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear.

**Most important symptoms/effects, acute and delayed**

**Symptoms:** If large amount of substance is absorbed, liberation of reaction product (methanol) can lead to symptoms of poisoning. Possible signs of poisoning include daze, dizziness, nausea, colicky abdominal pain or respiratory disturbance. Symptoms of increasing intoxication include dysopia or loss of eyesight. Treatment may include immediate gastric lavage, antidote treatment or correction of acid-base balance. Detection of the substance (methanol) is possible in blood. Evidence shows that the treatment of methanol absorption is enhanced through the administration of ethanol, which should be given to produce a blood level of at least 0.1%. Ethanol diminishes the production of toxic metabolites of methanol. Obtain treatment of allergic reaction if necessary.

**Hazards:** No data available.

**Indication of immediate medical attention and special treatment needed**

**Treatment:** No data available.

**5. Fire-fighting measures**

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** Water spray. Carbon Dioxide. foam dry powder

**Unsuitable extinguishing media:** high volume water jet

**Specific hazards arising from the chemical:** Standard procedure for chemical fires. Flammable liquid. Vapours may reach an ignition source and flash back. Explosive mixtures may form at temperatures at or above the flash point.

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:** Water used to extinguish fire should not enter drainage systems, soil or stretches of water. Ensure there are sufficient retaining facilities for water used to extinguish fire. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

**Special protective equipment for fire-fighters:** As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:** Use personal protective equipment. Keep away from sources of ignition - No smoking.

<b>Accidental release measures:</b>	Assure sufficient ventilation. Remove sources of ignition and ventilate area. Run off may create fire or explosion hazard in sewer.
<b>Methods and material for containment and cleaning up:</b>	Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
<b>Environmental Precautions:</b>	Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

## 7. Handling and storage

### Handling

<b>Technical measures (e.g. Local and general ventilation):</b>	Provide good ventilation or extraction.
<b>Safe handling advice:</b>	<p>Application, processing: Provide good ventilation or extraction. Handle in accordance with good industrial hygiene and safety practice. Wear suitable protective equipment. Do not breathe in vapours or aerosols. If workplace exposure limits are exceeded and/or larger amounts are released (leakage, spilling, dust) the indicated respiratory protection should be used. Avoid contact with eyes, skin, and clothing. If there is the possibility of skin/eye contact, the indicated hand/eye/body protection should be used. Keep away from heat. Keep away from sparks, flames and other sources of ignition. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use with adequate ventilation. Ground and bond containers when transferring material. Use explosion-proof equipment. Follow all SDS/label precautions even after the container is emptied because it may retain product residues. Wash thoroughly after handling. Vapors may spread long distances and travel to areas away from the work site before igniting or flashing back to the vapor source.</p> <p>Use non-sparking equipment when the level of vapors and/or mists can exceed the explosive limit, especially in areas with poor ventilation. Wear personal protective equipment; see section 8.</p>
<b>Contact avoidance measures:</b>	No data available.
<b>Hygiene measures:</b>	Avoid contact with skin, eyes and clothing. Do not inhale vapors or aerosols. Do not eat, drink, or smoke when using the product. Remove contaminated or saturated clothing.

### Storage

**Safe storage conditions:** Keep containers tightly closed in a cool, well-ventilated place. Take precautionary measures against static discharges. Keep away from sources of ignition - No smoking. Explosion protection equipment required. Danger of explosion from residual product fumes; therefore avoid spark production through cutting, grinding, or welding work in the area of the container. When repairs of the production system are to be made (e.g. welding work), the section to be repaired must be essentially free of product. Residual vapors might explode on ignition; do not apply heat, cut, drill, grind or weld on or near this container. This material may have a low electrical conductivity and therefore may accumulate dangerous levels of static electricity. An ignitable vapor-air mixture can form inside storage tanks. The user must be sure to dissipate static charge by careful bonding and grounding of all equipment and personnel involved in fluid transfer with continuity checks to prove effectiveness. Additional precautions against fire and explosion are the use of inert gas to purge vapor space; dip-pipes while filling vessels, especially lined vessels; grounded tank level floats; reduced flow velocity; self-closing valves on transfer lines and flame arrestors in vent lines. Additional guidance on fire and explosion protection may be found in various consensus standards, including NFPA 30, 69 and 77 and API 2003 as well as OSHA regulation 29CFR1910.106. Follow all SDS/label precautions even after container is emptied because it may retain product residues.

**Safe packaging materials:** No data available.

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
methanol	TWA	200 ppm	US. ACGIH Threshold Limit Values, as amended (03 2016)
	STEL	250 ppm	US. ACGIH Threshold Limit Values, as amended (03 2016)
	STEL	250 ppm 325 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	REL	200 ppm 260 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	PEL	200 ppm 260 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (03 2016)

#### Exposure guidelines

methanol	US. ACGIH Threshold Limit Values, as amended	Can be absorbed through the skin.
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**Appropriate Engineering Controls** Provide good ventilation or extraction.

### Individual protection measures, such as personal protective equipment

**Eye/face protection:** Use chemical splash goggles or face shield.

**Skin Protection**

<b>Hand Protection:</b>	Material: Butyl rubber. Break-through time: >= 480 min Material: Fluorinated rubber (Viton) Break-through time: >= 480 min Additional Information: The above mentioned hand protection is based on knowledge of the chemistry and anticipated uses of this product but it may not be appropriate for all workplaces. A hazard assessment should be conducted prior to use to ensure suitability of gloves for specific work environments and processes prior to use., Suitability for specific workplaces should be clarified with protective glove manufacturers., Use impermeable gloves.
<b>Skin and Body Protection:</b>	When handling larger quantities: Wear protective clothing made from non-flammable fibres. A safety shower and eye wash fountain should be readily available. To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product.
<b>Respiratory Protection:</b>	A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.
<b>Hygiene measures:</b>	Avoid contact with skin, eyes and clothing. Do not inhale vapors or aerosols. Do not eat, drink, or smoke when using the product. Remove contaminated or saturated clothing.

<b>9. Physical and chemical properties</b>
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**Appearance**

<b>Physical state:</b>	liquid
<b>Form:</b>	liquid
<b>Color:</b>	Colorless
<b>Odor:</b>	Aromatic
<b>Odor Threshold:</b>	not determined
<b>pH:</b>	not determined
<b>Freezing point:</b>	< -20 °C
<b>Boiling Point:</b>	137 °C (1,013 hPa) (DIN 51 751)
<b>Flash Point:</b>	33.89 °C (Pensky-Martens C.C.)
<b>Evaporation Rate:</b>	not determined
<b>Flammability (solid, gas):</b>	No data available.

<b>Explosive limit - upper (%):</b>	not determined
<b>Explosive limit - lower (%):</b>	not determined
<b>Vapor pressure:</b>	93 hPa (20 °C)
<b>Vapor density (air=1):</b>	No data available.
<b>Density:</b>	0.94 g/cm <sup>3</sup> (20 °C) (DIN 51757)
<b>Relative density:</b>	No data available.
<b>Solubility(ies)</b>	
<b>Solubility in Water:</b>	not miscible decomposition by hydrolysis
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	not determined
<b>Self Ignition Temperature:</b>	No data available.
<b>Decomposition Temperature:</b>	not determined

<b>Kinematic viscosity:</b>	No data available.
<b>Dynamic viscosity:</b>	not determined
<b>Other information</b>	
<b>Explosive properties:</b>	not explosive
<b>Oxidizing properties:</b>	No data available.
<b>Minimum ignition temperature:</b>	Not determined.

## 10. Stability and reactivity

<b>Reactivity:</b>	No dangerous reaction known under conditions of normal use.
<b>Chemical Stability:</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions:</b>	No dangerous reactions known.
<b>Conditions to avoid:</b>	Keep away from heat and sources of ignition. Vapours can form explosive mixtures with air.
<b>Incompatible Materials:</b>	Water.
<b>Hazardous Decomposition Products:</b>	Silicone polymers. Methanol in case of hydrolysis.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.
<b>Ingestion:</b>	No data available.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.
<b>Ingestion:</b>	No data available.

### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

##### Oral

##### Product:

##### Components:

Trimethoxypropylsilane	LD 50 (Rat): > 5,170 mg/kg
methanol	LD 50 (Rat): 100 mg/kg

**Dermal****Product:****Components:**

Trimethoxypropylsilane	No data available.
methanol	LD 50 (Rat): 300 mg/kg

**Inhalation****Product:****Components:**

Trimethoxypropylsilane	LC 50 (Rat): 22.2 mg/l Dusts, mists and fumes
methanol	LC 50 (Rat): 3 mg/l Vapour

**Repeated dose toxicity****Product:**

No toxicological tests have been conducted with the product itself.

**Skin Corrosion/Irritation****Product:**

Skin irritation OECD Test Guideline 404 (Rabbit): Skin irritation

**Serious Eye Damage/Eye Irritation****Product:**

Not irritating Rabbit: Not irritating

**Respiratory or Skin Sensitization****Product:**

Buehler Test, OECD Test Guideline 406 (Guinea Pig): Not a skin sensitizer.

**Carcinogenicity****Product:**

No data available.

**Components:**

methanol	Not classified
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**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogens present or none present in regulated quantities

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogens present or none present in regulated quantities

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**

No carcinogens present or none present in regulated quantities

**Germ Cell Mutagenicity****In vitro****Product:**

No toxicological tests have been conducted with the product itself.

**In vivo****Product:**

No toxicological tests have been conducted with the product itself.

**Reproductive toxicity****Product:**

No indications of critical properties in analogy to similar products or on the basis of structure-activity relationships.

**Specific Target Organ Toxicity - Single Exposure****Product:**

No toxicological tests have been conducted with the product itself.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** No toxicological tests have been conducted with the product itself.

**Aspiration Hazard**

**Product:** Not classified

**Other effects:** No data available.

**12. Ecological information****Ecotoxicity:****Acute hazards to the aquatic environment:****Fish**

**Product:** No investigations were carried out with the mixture itself.

**Aquatic Invertebrates**

**Product:** No investigations were carried out with the mixture itself.

**Chronic hazards to the aquatic environment:****Fish**

**Product:** No data available.

**Aquatic Invertebrates**

**Product:** No data available.

**Toxicity to Aquatic Plants**

**Product:** No investigations were carried out with the mixture itself.

**Persistence and Degradability****Biodegradation**

**Product:** 54 %

**BOD/COD Ratio**

**Product:** No data available.

**Bioaccumulative potential****Bioconcentration Factor (BCF)**

**Product:** not bioaccumulative

**Partition Coefficient n-octanol / water (log Kow)**

**Product:** Log Kow: not determined

**Mobility in soil:**

Adsorption on the floor: low.

**Other adverse effects:**

No ecotoxicological studies are available.

**13. Disposal considerations**

**Disposal methods:** Waste must be disposed of in accordance with federal, provincial, state and local regulations. Empty containers must be handled with care due to product residue. **DO NOT HEAT OR CUT THE EMPTY CONTAINER WITH AN ELECTRIC OR GAS TORCH.**

**Contaminated Packaging:** Do not reuse empty containers and dispose of in accordance with the regulations issued by the appropriate local authorities. If there is product residue in the emptied container, follow directions for handling on the container's label. Incorrect disposal or reuse of this container is illegal and can be dangerous. Other countries: observe the national regulations.

## 14. Transport information

### Domestic regulation

#### 49 CFR

UN/ID/NA number : UN 1993  
Proper shipping name : Flammable liquids, n.o.s.  
(alkyl silane, contains methanol)  
Class : 3  
Packing group : III  
Labels : 3  
ERG Code : 128  
Marine pollutant : no

### International Regulations

#### IATA-DGR

UN/ID No. : UN 1993  
Proper shipping name : Flammable liquid, n.o.s.  
(alkyl silane, contains methanol)  
Class : 3  
Packing group : III  
Labels : 3  
Packing instruction (cargo aircraft) : 366  
Packing instruction (passenger aircraft) : 355  
Remarks : Maximum Net Quantity per Package 220 L

#### IMDG-Code

UN number : UN 1993  
Proper shipping name : FLAMMABLE LIQUID, N.O.S.

(alkyl silane, contains methanol)

Class : 3  
Packing group : III  
Labels : 3  
EmS Code : F-E, S-E  
Marine pollutant : no

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

Not applicable for product as supplied.

**Special precautions for user**

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

**15. Regulatory information****US Federal Regulations****TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

None present or none present in regulated quantities.

**US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)**

None present or none present in regulated quantities.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

None present or none present in regulated quantities.

**CERCLA Hazardous Substance List (40 CFR 302.4):**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
methanol	5000 lbs.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)****Hazard categories**

Flammable (gases, aerosols, liquids, or solids), Skin Corrosion or Irritation

**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

**US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances****SARA 311/312 Hazardous Chemical**

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
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**SARA 313 (TRI Reporting)**

None present or none present in regulated quantities.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**

None present or none present in regulated quantities.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

None present or none present in regulated quantities.

### US State Regulations

#### US. California Proposition 65



**WARNING:** This product can expose you to chemicals including, methanol, which is [are] known to the State of California to cause birth defects or other reproductive harm.

#### US. New Jersey Worker and Community Right-to-Know Act

No ingredient regulated by NJ Right-to-Know Law present.

#### US. Massachusetts RTK - Substance List

No ingredient regulated by MA Right-to-Know Law present.

#### US. Pennsylvania RTK - Hazardous Substances

No ingredient regulated by PA Right-to-Know Law present.

#### US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

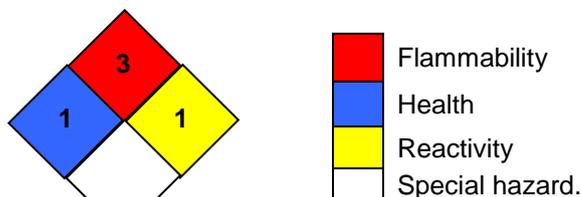
### 16. Other information, including date of preparation or last revision

#### HMIS Hazard ID

<b>Health</b>		1
<b>Flammability</b>		3
<b>Physical Hazards</b>		1
<b>PERSONAL PROTECTION</b>		

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; \*Chronic health effect

#### NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

**Issue Date:** 09/06/2019

**Version #:** 1.1

**Further Information:** No data available.

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

**Disclaimer:**

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