1. Identification

1.1. Product identifier

Trade name: Protectosil® AQUA-TRETE 40
Chemical Name: Protectosil® AQUA-TRETE BSM 40

1.2. Recommended use of the chemical and restrictions on use

Relevant applications identified: For industrial use
Function: Waterproofing agent

1.3. Details of the supplier of the safety data sheet

Company: Evonik Corporation
Address: 299 Jefferson Road
Parsippany, NJ 07054-0677
USA

Telephone: 973-929-8000
Telefax: 973-929-8040
Email address: Product-Regulatory-Services@evonik.com

1.4. 24 HOUR EMERGENCY TELEPHONE NUMBERS:

CHEMTREC - US & CANADA: 800-424-9300
CHEMTREC MEXICO: 01-800-681-9531
CHEMTREC INTERNATIONAL: +1 703-527-3887 (collect calls accepted)
Product Regulatory Services: 973-929-8060

2. Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation 29CFR 1910.1200
Skin irritation Category 2 H315

2.2. Label elements

Statutory basis Classification according to Regulation 29CFR 1910.1200
Signal word: Warning

Hazard statement: H315 - Causes skin irritation.

Precautionary statement: Prevention
P264 - Wash skin thoroughly after handling.
P280 - Wear protective gloves.

Precautionary statement: Reaction
P302 + P352 - IF ON SKIN: Wash with plenty of water/soap.
P332 + P313 - If skin irritation occurs: Get medical advice/attention.
P362 - Take off contaminated clothing and wash before reuse.

2.3. Other hazards
None known.

3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triethoxyoctylsilane</td>
<td>20% - 60%</td>
</tr>
<tr>
<td>CAS-No.</td>
<td>2943-75-1</td>
</tr>
<tr>
<td>Skin irritation Category 2</td>
<td></td>
</tr>
<tr>
<td>NJTSR No. 56705700001-6834P</td>
<td>7% - 13%</td>
</tr>
<tr>
<td>Remarks</td>
<td>Trade Secret</td>
</tr>
</tbody>
</table>

4. First aid measures

4.1. Description of first aid measures

Inhalation
If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If unconscious, evaluate the need for artificial respiration. Get immediate medical attention.

Skin contact
Remove contaminated clothing/shoes. Flush skin with water. Follow by washing with soap and water. If symptoms develop or persist, obtain medical attention. Wash clothing before reuse.

Eye contact
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes or until all material has been removed. Obtain medical attention.

Ingestion
Aspiration of material into the lungs may cause chemical pneumonitis (damage to lungs) which may be fatal.
If swallowed, get medical attention immediately. Only induce vomiting if directed by a physician. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms
None known

4.3. Indication of any immediate medical attention and special treatment needed
None known.

5. Fire-fighting measures
5.1. **Extinguishing media**

Suitable extinguishing media: Use water spray or fog, foam, dry chemical or CO₂.

Unsuitable extinguishing media: High volume water jet.

5.2. **Special hazards arising from the substance or mixture**

5.3. **Advice for firefighters**

Containers can build up pressure if exposed to heat (fire). Cool with water spray.

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

6. **Accidental release measures**

6.1. **Personal precautions, protective equipment and emergency procedures**

Wear personal protective equipment; see section 8.

6.2. **Environmental precautions**

Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

6.3. **Methods and material for containment and cleaning up**

Absorb spill with inert material, then place in a chemical waste container.

7. **Handling and storage**

7.1. **Precautions for safe handling**

Use only in well-ventilated areas. Wear personal protective equipment; see section 8.

7.2. **Conditions for safe storage, including any incompatibilities**

Advice on protection against fire and explosion

Normal measures for preventive fire protection.

**Storage**

Keep tightly closed in a dry and cool place.

8. **Exposure controls / personal protection**

8.1. **Control parameters**

<table>
<thead>
<tr>
<th>Ethanol</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Time Weighted Average (TWA) Permissible Exposure Limit (PEL) (US CA OEL)</th>
<th>Time Weighted Average (TWA) (ACGIH)</th>
<th>Time Weighted Average (TWA) (TN OEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>64-17-5</td>
<td>1000 ppm</td>
<td>Time Weighted Average (TWA) Permissible Exposure Limit (PEL) (US CA OEL)</td>
<td>Time Weighted Average (TWA) (ACGIH)</td>
<td>Time Weighted Average (TWA) (TN OEL)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1900 mg/m³</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1000 ppm</td>
<td>1900 mg/m³</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8.2. **Exposure controls**

**Personal protective equipment**
Respiratory protection
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.

Hand protection
Use impermeable gloves.

Eye protection
Use chemical splash goggles or face shield.

Skin and body protection
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.

9. Physical and chemical properties
9.1. Information on basic physical and chemical properties
Physical state  liquid
Color           white
Form            liquid
Odor            odorless
Odor Threshold  no data available
pH              7  (1 % solution)

Melting point/range  no data available
Melting point/range  not applicable
Boiling point/range  100 °C
Flash point  95 °C  Method: Tagliabue Closed Cup
Evaporation rate  not determined
Flammability (solid, gas)  no data available
Lower explosion limit  not determined
Upper explosion limit  not determined
Vapor pressure  not determined
Vapor density  no data available
Relative vapor density  Heavier than air
Density  no data available
Water solubility  miscible with water
Partition coefficient: n-octanol/water not determined
Autoignition temperature not determined
Thermal decomposition no data available
Viscosity, dynamic no data available

9.2. Other information
Explosiveness no data available

% VOC (gm/l) 340

10. Stability and reactivity
10.1. Reactivity
No dangerous reaction known under conditions of normal use.

10.2. Chemical stability
Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions
Possibility of hazardous reactions known. No dangerous reactions known.

10.4. Conditions to avoid
No specific hazards are known.

10.5. Incompatible materials
Alkaline, strong bases, strong oxidants, strong acids

10.6. Hazardous decomposition products
Ethanol in case of hydrolysis

This product is stable under normal storage conditions.

11. Toxicological information
11.1. Information on toxicological effects
carcinogenicity assessment
Contains no carcinogenic substances as defined by NTP, IARC and/or OSHA.

Toxicological information on components
Triethoxyoctylsilane

Acute oral toxicity LD50 Rat: > 5110 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity LC0 Rat: 22 ppm / 4 h / vapor
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity maximum concentration in the test: no animals died.
Acute dermal toxicity
LD50 Rabbit: 6730 mg/kg
Method: OECD Test Guideline 402

Skin irritation
Rabbit
Skin irritation
Method: OECD Test Guideline 404

Eye irritation
Rabbit
No eye irritation
Method: OECD Test Guideline 405

Sensitization
maximization test Guinea pig: Does not cause skin sensitization.
Method: OECD Test Guideline 406
Test substance: Structurally similar substance

Repeated dose toxicity
Oral Rat / 28-day
NOAEL: 300 mg/kg
Method: OECD TG 422

Assessment of STOT single exposure
Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

Assessment of STOT repeat exposure
Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Risk of aspiration toxicity
No evidence of aspiration toxicity

Gentoxicity in vitro
Ames test Salmonella typhimurium
negative
Method: OECD TG 471

chromosomal aberration Chinese hamster (CHO K1 -cells)
negative
Method: OECD TG 473

Genetic mutation in mammal cells TK +/- mouse lymphoma cell (L5178Y)
negative
Method: OECD TG 476

Carcinogenicity
No data available

Toxicity to reproduction
Screening for reproductive/developmental toxicity Oral Rat
Number of exposures: daily
NOAEL (No Observed Adverse Effect Level) of parents:
300 mg/kg
Method: OECD TG 422

Screening for reproductive/developmental toxicity Oral Rat
Number of exposures: daily
NOAEL F1:
300 mg/kg
Method: OECD TG 422

12. Ecological information
12.1. **Toxicity**  
*No ecotoxicological studies are available on the mixture.*

12.2. **Persistence and degradability**  
Biodegradability: No data available

12.3. **Bioaccumulative potential**  
Bioaccumulation: No data available

12.4. **Mobility in soil**  
Mobility: No data available

12.5. **Other adverse effects**  
Further Information: No ecotoxicological studies are available. An Expert Judgment stated that no classification is necessary based on present knowledge.

13. **Disposal considerations**

13.1. **Waste treatment methods**

**Product**
Waste must be disposed of in accordance with local, state, provincial and federal laws and regulations. Empty containers must be handled with care due to product residue.

**Uncleaned packaging**
Packaging material should be recycled or disposed of in accordance with federal, state and local regulations.

14. **Transport information**

Not dangerous according to transport regulations.

14.1. UN number: --
14.2. UN proper shipping name: --
14.3. Transport hazard class(es): --
14.4. Packing group: --
14.5. Environmental hazards (Marine pollutant): --
14.6. Special precautions for user: Yes
Not dangerous according to transport regulations.

15. **Regulatory information**

US Federal Regulations
OSHA
If listed below, chemical specific standards apply to the product or components:

- None listed

Clean Air Act Section (112)
If listed below, components present at or above the de minimus level are hazardous air pollutants:

- None listed

CERCLA Reportable Quantities
If listed below, a reportable quantity (RQ) applies to the product based on the percent of the named component:

- None listed

SARA Title III Section 311/312 Hazard Categories
The product meets the criteria only for the listed hazard classes:

- Acute Health Hazard

SARA Title III Section 313 Reportable Substance s
If listed below, components are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

- None listed

Toxic Substances Control Act (TSCA)
If listed below, non-proprietary substances are subject to export notification under Section 12 (b) of TSCA:

- None listed

State Regulations

The Listing requirements of the Right to Know (RTK) legislation varies by state. All information for NJ, PA, MA and other states can be derived from the listing of hazardous and non-hazardous components in section 2 and 15 of this MSDS.

California Proposition 65

A warning under the California Drinking Water Act is required only if listed below:

- None listed

An employer using HMIS/NFPA labeling must through training ensure that its employees are fully aware of the hazards of the chemicals used.

HMIS Ratings

Health: 2
Flammability : 1
Physical Hazard : 0

NFPA Ratings

Health : 2
Flammability : 1
Reactivity : 0

16. Other information

Further information

Revision date 05/19/2015

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

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Legend

<table>
<thead>
<tr>
<th>ACC</th>
<th>American Chemistry Council</th>
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</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>American Conference of Governmental Industrial Hygienists</td>
</tr>
<tr>
<td>ACS</td>
<td>Advisory Committee on Sustainability</td>
</tr>
<tr>
<td>ADI</td>
<td>Acceptable Daily Intake</td>
</tr>
<tr>
<td>ASTM</td>
<td>American Society for Testing and Materials</td>
</tr>
<tr>
<td>ATP</td>
<td>Adaptation to Technical Progress</td>
</tr>
<tr>
<td>BCF</td>
<td>Bioconcentration factor</td>
</tr>
<tr>
<td>BOD</td>
<td>Biochemical oxygen demand</td>
</tr>
<tr>
<td>c.c.</td>
<td>closed cup</td>
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<tr>
<td>CAO</td>
<td>Cargo Aircraft Only</td>
</tr>
<tr>
<td>Carc</td>
<td>Carcinogen</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstract Services</td>
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<tr>
<td>CDN</td>
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<td>C EPA</td>
<td>Canadian Environmental Protection Act</td>
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<td>CERCLA</td>
<td>Comprehensive Environmental Response – Compensation and Liability Act</td>
</tr>
<tr>
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<td>Code of Federal Regulations</td>
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<td>CMR</td>
<td>carcinogenic- mutagenic-toxic for reproduction</td>
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<td>COD</td>
<td>Chemical oxygen demand</td>
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<td>DIN</td>
<td>German Institute for Standardization</td>
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<tr>
<td>DM EL</td>
<td>Derived minimum effect level</td>
</tr>
<tr>
<td>DNEL</td>
<td>Derived no effect level</td>
</tr>
<tr>
<td>DOT</td>
<td>Department of Transportation</td>
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<tr>
<td>EC50</td>
<td>half maximal effective concentration</td>
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<td>EPA</td>
<td>Environmental Protection Agency</td>
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<td>ErC50</td>
<td>Reduction of Growth Rate</td>
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<tr>
<td>ERG</td>
<td>Emergency Response Guide Book</td>
</tr>
<tr>
<td>FDA</td>
<td>Food and Drug Administration</td>
</tr>
<tr>
<td>GHS</td>
<td>Globally Harmonized System of Classification and Labelling of Chemicals (GHS)</td>
</tr>
<tr>
<td>GLP</td>
<td>Good Laboratory Practice</td>
</tr>
<tr>
<td>GMO</td>
<td>Genetic Modified Organism</td>
</tr>
<tr>
<td>HCS</td>
<td>Hazard Communication Standard</td>
</tr>
<tr>
<td>HMIS</td>
<td>Hazardous Materials Identification System</td>
</tr>
<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IBC</td>
<td>Intermediate Bulk Container</td>
</tr>
<tr>
<td>ICAO-TI</td>
<td>International Civil Aviation Organization- Technical Instructions</td>
</tr>
<tr>
<td>ICCA</td>
<td>International Council of Chemical Association</td>
</tr>
<tr>
<td>ID</td>
<td>Identification number</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods</td>
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<tr>
<td>IUPAC</td>
<td>International Union of Pure and Applied Chemistry</td>
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<tr>
<td>ISO</td>
<td>International Organization for Standardization</td>
</tr>
<tr>
<td>LC50</td>
<td>50 % Lethal Concentration</td>
</tr>
<tr>
<td>LD50</td>
<td>50 % Lethal Dose</td>
</tr>
<tr>
<td>L(E)C 50</td>
<td>LC50 or EC50</td>
</tr>
<tr>
<td>LOA EL</td>
<td>Lowest observed adverse effect level</td>
</tr>
<tr>
<td>LOEL</td>
<td>Lowest observed effect level</td>
</tr>
<tr>
<td>MARPOL</td>
<td>International Convention for the Prevention of Pollution from Ships</td>
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<td>NFPA</td>
<td>National Fire Protection Association</td>
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<td>NOAEL</td>
<td>No observed adverse effect level</td>
</tr>
<tr>
<td>NOEC</td>
<td>no observed effect concentration</td>
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<tr>
<td>NOEL</td>
<td>no observed effect level</td>
</tr>
<tr>
<td>o. c.</td>
<td>open cup</td>
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<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
</tr>
<tr>
<td>OEL</td>
<td>Occupational Exposure Limit</td>
</tr>
<tr>
<td>OSHA</td>
<td>Occupational Safety and Health Administration</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, bioaccumulative, toxic</td>
</tr>
<tr>
<td>PEC</td>
<td>Predicted effect concentration</td>
</tr>
<tr>
<td>PNEC</td>
<td>Predicted no effect concentration</td>
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<td>Reportable Quantity</td>
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<td>SDS</td>
<td>Safety Data Sheet</td>
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<td>STOT</td>
<td>Specific Target Organ Toxicity</td>
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<td>UN</td>
<td>United Nations</td>
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<tr>
<td>vPvB</td>
<td>very persistent, very bioaccumulative</td>
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<td>SAFETY DATA SHEET</td>
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| Material no. | Version | 4.0 / US |
| Specification | Revision date | 05/19/2015 |
| Order number | Print date | 09/16/2015 |

**VOC**
Volatile organic compounds

**WHMIS**
Workplace Hazardous Materials Information System

**WHO**
World Health Organization