



TRIHYDROXYSILYLETHYL PHENYLSULPHONIC ACID, 25% in water

Safety Data Sheet SIT8378.1

Date of issue: 22/08/2017

Version: 1.0

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

1.1. Product identifier

| | |
|-----------------|---|
| Product form | : Mixture |
| Physical state | : Liquid |
| Product name | : TRIHYDROXYSILYLETHYL PHENYLSULPHONIC ACID, 25% in water |
| Product code | : SIT8378.1 |
| Formula | : C ₈ H ₁₂ O ₆ SSi |
| Synonyms | : BENZENESULFONIC ACID, [2-(TRIHYDROXYSILYL)ETHYL]- 4-[2-(TRIHYDROXYSILYL)ETHYL]BENZENESULFONIC ACID |
| Chemical family | : SILICATE SOLUTION |

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Chemical intermediate

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

GELEST, INC.

11 East Steel Road
Morrisville, PA 19067

USA

T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST

info@gelest.com - www.gelest.com

GELEST INC.

Fritz-Klatte-Strasse 8
65933 Frankfurt

Germany

T +49 (0) 69 3535106-500 - F +49 (0) 69 3535106-501 - (M-F): 8:00 AM - 4:00 PM

info@gelestde.com - www.gelestde.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 1C H314

Serious eye damage/eye irritation, Category 1 H318

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) : Danger

Hazardous ingredients : Trihydroxysilylethyl phenylsulphonic acid

Hazard statements (CLP) : H314 - Causes severe skin burns and eye damage.

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Precautionary statements (CLP) : P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P260 - Do not breathe vapours.
P264 - Wash hands thoroughly after handling.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor/physician

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---|----|---|
| Water | (CAS-No.) 7732-18-5 (EC-No.) 231-791-2 | 75 | Not classified |
| Trihydroxysilylethyl phenylsulphonic acid | (CAS-No.) 143282-00-2/876338-08-8 | 25 | Skin Corr. 1A, H314 Eye Dam. 1, H318 |

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). If possible show this sheet; if not available show packaging or label.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact : Wash with plenty of water/.... Get immediate medical advice/attention.

First-aid measures after eye contact : Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Get medical advice/attention.

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

Symptoms/effects : Causes severe skin burns and eye damage.

Symptoms/effects after inhalation : May cause irritation to the respiratory tract. Overexposure may cause: Cough. Headache. Nausea.

Symptoms/effects after skin contact : Causes (severe) skin burns.

Symptoms/effects after eye contact : Causes serious eye damage.

Symptoms/effects after ingestion : May be harmful if swallowed.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Not combustible.

Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Protection during firefighting : Avoid all eye and skin contact and do not breathe vapour and mist. Do not enter fire area without proper protective equipment, including respiratory protection.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment : Wear protective equipment as described in Section 8.
Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid all eye and skin contact and do not breathe vapour and mist. Provide good ventilation in process area to prevent formation of vapour.
Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Store locked up.
Storage conditions : Keep container tightly closed.
Incompatible materials : Alkalis.
Storage area : Store in a well-ventilated place.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Provide local exhaust or general room ventilation.

Personal protective equipment:

Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Hand protection:

Neoprene or nitrile rubber gloves

Eye protection:

Chemical goggles or face shield. Contact lenses should not be worn

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. NIOSH-certified combination organic vapor/acid gas (yellow cartridge) respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid

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| | |
|--|---------------------------------------|
| Appearance | : Clear solution. |
| Molecular mass | : 264.33 g/mol |
| Colour | : No data available |
| Odour | : No data available |
| Odour threshold | : No data available |
| Refractive index | : No additional information available |
| pH | : No data available |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : 100 °C initial (water) |
| Flash point | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : Non flammable. |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : No data available |
| Solubility | : Soluble in water. |
| Log Pow | : No data available |
| Log Kow | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Explosive limits | : No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Alkalis.

10.6. Hazardous decomposition products

Carbon dioxide. Silicon dioxide. Sulfur dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Water (7732-18-5)

| | |
|---------------|------------|
| LD50 oral rat | > 90 ml/kg |
|---------------|------------|

Skin corrosion/irritation : Causes severe skin burns and eye damage.

Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

None of the components in this product at concentrations >0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

Reproductive toxicity : Not classified

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| | |
|-------------------------------------|---|
| STOT-single exposure | : Not classified |
| STOT-repeated exposure | : Not classified |
| Aspiration hazard | : Not classified |
| Symptoms/effects after inhalation | : May cause irritation to the respiratory tract. Overexposure may cause: Cough. Headache. Nausea. |
| Symptoms/effects after skin contact | : Causes (severe) skin burns. |
| Symptoms/effects after eye contact | : Causes serious eye damage. |
| Symptoms/effects after ingestion | : May be harmful if swallowed. |

SECTION 12: Ecological information

12.1. Toxicity

| | |
|--------------------------|------------------|
| Acute aquatic toxicity | : Not classified |
| Chronic aquatic toxicity | : Not classified |

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other adverse effects : This substance may be hazardous to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|--|--|
| Sewage disposal recommendations | : Do not dispose of waste into sewer. |
| Product/Packaging disposal recommendations | : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to licensed waste disposal facility. |
| Ecology - waste materials | : Avoid release to the environment. |

SECTION 14: Transport information

14.1. UN number

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

| | |
|---------------|--------|
| UN-No. (ADR) | : 3265 |
| UN-No. (IMDG) | : 3265 |
| UN-No. (IATA) | : 3265 |
| UN-No. (ADN) | : 3265 |
| UN-No. (RID) | : 3265 |

14.2. UN proper shipping name

| | |
|---------------------------------------|--|
| Proper Shipping Name (ADR) | : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. |
| Proper Shipping Name (IMDG) | : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. |
| Proper Shipping Name (IATA) | : Corrosive liquid, acidic, organic, n.o.s. |
| Proper Shipping Name (ADN) | : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. |
| Proper Shipping Name (RID) | : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. |
| Transport document description (ADR) | : UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (TRIHYDROXYSILYLETHYL PHENYLSULPHONIC ACID, 25% in water), 8, III, (E) |
| Transport document description (IMDG) | : UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (TRIHYDROXYSILYLETHYL PHENYLSULPHONIC ACID, 25% in water), 8, III |
| Transport document description (IATA) | : UN 3265 Corrosive liquid, acidic, organic, n.o.s. (TRIHYDROXYSILYLETHYL PHENYLSULPHONIC ACID, 25% in water), 8, III |
| Transport document description (ADN) | : UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (TRIHYDROXYSILYLETHYL PHENYLSULPHONIC ACID, 25% in water), 8, III |
| Transport document description (RID) | : UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (TRIHYDROXYSILYLETHYL PHENYLSULPHONIC ACID, 25% in water), 8, III |

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14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 8

Danger labels (ADR) : 8

:



IMDG

Transport hazard class(es) (IMDG) : 8

Danger labels (IMDG) : 8

:



IATA

Transport hazard class(es) (IATA) : 8

Hazard labels (IATA) : 8

:



ADN

Transport hazard class(es) (ADN) : 8

Danger labels (ADN) : 8

:



RID

Transport hazard class(es) (RID) : 8

Danger labels (RID) : 8

:



14.4. Packing group

Packing group (ADR) : III

Packing group (IMDG) : III

Packing group (IATA) : III

Packing group (ADN) : III

Packing group (RID) : III

14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available

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14.6. Special precautions for user

- Overland transport

| | |
|---|---------------------------|
| Classification code (ADR) | : C3 |
| Special provisions (ADR) | : 274 |
| Limited quantities (ADR) | : 5I |
| Excepted quantities (ADR) | : E1 |
| Packing instructions (ADR) | : P001, IBC03, LP01, R001 |
| Mixed packing provisions (ADR) | : MP19 |
| Portable tank and bulk container instructions (ADR) | : T7 |
| Portable tank and bulk container special provisions (ADR) | : TP1, TP28 |
| Tank code (ADR) | : L4BN |
| Vehicle for tank carriage | : AT |
| Transport category (ADR) | : 3 |
| Special provisions for carriage - Packages (ADR) | : V12 |
| Hazard identification number (Kemler No.) | : 80 |
| Orange plates | : |



| | |
|-------------------------------|------|
| Tunnel restriction code (ADR) | : E |
| EAC code | : 2X |
| APP code | : B |

- Transport by sea

| | |
|------------------------------------|--|
| Special provisions (IMDG) | : 223, 274 |
| Limited quantities (IMDG) | : 5 L |
| Excepted quantities (IMDG) | : E1 |
| Packing instructions (IMDG) | : P001, LP01 |
| IBC packing instructions (IMDG) | : IBC03 |
| Tank instructions (IMDG) | : T7 |
| Tank special provisions (IMDG) | : TP1, TP28 |
| EmS-No. (Fire) | : F-A |
| EmS-No. (Spillage) | : S-B |
| Stowage category (IMDG) | : A |
| Stowage and handling (IMDG) | : SW2 |
| Properties and observations (IMDG) | : Causes burns to skin, eyes and mucous membranes. |

- Air transport

| | |
|--|--------|
| PCA Excepted quantities (IATA) | : E1 |
| PCA Limited quantities (IATA) | : Y841 |
| PCA limited quantity max net quantity (IATA) | : 1L |
| PCA packing instructions (IATA) | : 852 |
| PCA max net quantity (IATA) | : 5L |
| CAO packing instructions (IATA) | : 856 |
| CAO max net quantity (IATA) | : 60L |
| Special provisions (IATA) | : A3 |
| ERG code (IATA) | : 8L |

- Inland waterway transport

| | |
|-----------------------------------|----------|
| Classification code (ADN) | : C3 |
| Special provisions (ADN) | : 274 |
| Limited quantities (ADN) | : 5 L |
| Excepted quantities (ADN) | : E1 |
| Carriage permitted (ADN) | : T |
| Equipment required (ADN) | : PP, EP |
| Number of blue cones/lights (ADN) | : 0 |

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- Rail transport

| | |
|---|---------------------------|
| Classification code (RID) | : C3 |
| Special provisions (RID) | : 274 |
| Limited quantities (RID) | : 5L |
| Excepted quantities (RID) | : E1 |
| Packing instructions (RID) | : P001, IBC03, LP01, R001 |
| Mixed packing provisions (RID) | : MP19 |
| Portable tank and bulk container instructions (RID) | : T7 |
| Portable tank and bulk container special provisions (RID) | : TP1, TP28 |
| Tank codes for RID tanks (RID) | : L4BN |
| Transport category (RID) | : 3 |
| Special provisions for carriage – Packages (RID) | : W12 |
| Colis express (express parcels) (RID) | : CE8 |
| Hazard identification number (RID) | : 80 |

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

Contains no REACH Annex XIV substances

15.1.2. National regulations

Germany

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Abbreviations and acronyms:

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Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemical Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development; GHS: The Globally Harmonized System of Classification and Labelling; APF: Assigned Protection Factor

Other information

: Prepared by safety and environmental affairs.

Full text of H- and EUH-statements:

| | |
|---------------|---|
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| Skin Corr. 1A | Skin corrosion/irritation, Category 1A |
| Skin Corr. 1C | Skin corrosion/irritation, Category 1C |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage. |

SDS EU (REACH Annex II) - Custom

The information contained in this document has been gathered from reference materials and/or Gelest, Inc. test data and is to the best knowledge and belief of Gelest, Inc. accurate and reliable. Such information is offered solely for your consideration, investigation and verification. It is not suggested or guaranteed that the hazard precautions or procedures described are the only ones which exist. Gelest, Inc. makes no warranties, express or implied, with respect to the use of such information and assumes no responsibility therefore. Information on this safety data sheet is not intended to constitute a basis for product specifications.

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