SECTION 1: Identification

1.1. Identification
Product name: 3-(TRIHYDROXYLSILYL)-1-PROPANESULFONIC ACID, 30-35% in water
Product code: SIT8378.3
Product form: Mixture
Physical state: Liquid
Formula: C3H10O6SSi
Synonyms: SULFOPROPYL SILANETRIOL
Chemical family: SILICATE SOLUTION

1.2. Recommended use and restrictions on use
Recommended use: Chemical intermediate

1.3. Supplier
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

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

SECTION 2: Hazard(s) Identification

2.1. Classification of the substance or mixture
GHS US classification
Skin corrosion/irritation Category 1A  H314 - Causes severe skin burns and eye damage
Serious eye damage/eye irritation Category 1  H318 - Causes serious eye damage
Full text of H statements: see section 16

2.2. GHS Label elements, including precautionary statements
GHS US labeling
Hazard pictograms (GHS US): ❌

Signal word (GHS US): Danger
Hazard statements (GHS US): H314 - Causes severe skin burns and eye damage
Precautionary statements (GHS US): P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P260 - Do not breathe vapors.
P264 - Wash hands thoroughly after handling.
P310 - Immediately call a doctor.
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.
P303+P361+P353 - If on skin (or hair): take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P363 - Wash contaminated clothing before reuse.
P405 - Store locked up.
P501 - Dispose of contents/container to licensed waste disposal facility.

2.3. Hazards not otherwise classified (HNOC)
No additional information available

2.4. Unknown acute toxicity (GHS US)
Not applicable
3-(TRIHYDROXYSILYL)-1-PROPANESULFONIC ACID, 30-35% in water
Safety Data Sheet

SECTION 3: Composition/Information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>(CAS-No.) 7732-18-5</td>
<td>65 – 70</td>
<td>Not classified</td>
</tr>
<tr>
<td>3-(Trihydroxysilyl)-1-propanesulfonic acid</td>
<td>(CAS-No.) 70942-24-4</td>
<td>30 – 35</td>
<td>Skin Corr. 1A, H314 Eye Dam. 1, H318</td>
</tr>
</tbody>
</table>

Full text of hazard classes and 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 victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact : Wash with plenty of soap and 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 (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: Coughing. 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. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media
Suitable extinguishing media : Not combustible.

5.2. Specific hazards arising from the chemical

5.3. Special protective equipment and precautions for fire-fighters
Protection during firefighting : Avoid all eye and skin contact and do not breathe vapor and mist. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel
Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders
Protective equipment : Equip cleanup crew with proper 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

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it. Sweep or shovel spills into appropriate container for disposal.

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 : Use only in well ventilated areas. Avoid all eye and skin contact and do not breathe vapor and mist.
3-(TRIHYDROXYSILYL)-1-PROPANESULFONIC ACID, 30-35% in water
Safety Data Sheet

Hygiene measures: Wash hands thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Keep container tightly closed.
Incompatible materials: Alkalis.
Storage area: Store in a well-ventilated place.

SECTION 8: Exposure controls/personal protection
8.1. Control parameters
No additional information available

8.2. Appropriate engineering controls
Appropriate engineering controls: Provide local exhaust or general room ventilation.

8.3. Individual protection measures/Personal protective equipment
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.

Personal protective equipment symbol(s):

SECTION 9: Physical and chemical properties
9.1. Information on basic physical and chemical properties
Physical state: Liquid
Appearance: Clear solution.
Molecular mass: 202.26 g/mol
Color: No data available
Odor: No data available
Odor threshold: No data available
Refractive index: No data available
pH: < 1
Relative evaporation rate (butyl acetate=1): No data available
Melting point: < 0 °C
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.
Vapor pressure: < 1 mm Hg @ 20°C
Relative vapor density at 20 °C: No data available
Relative density: 1.12
Solubility: Soluble in water.
Partition coefficient n-octanol/water (Log Pow): No data available
3-(TRIHYDROXYSILYL)-1-PROPANESULFONIC ACID, 30-35% in water
Safety Data Sheet

Partition coefficient n-octanol/water (Log Kow) : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosion 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

<table>
<thead>
<tr>
<th>Acute toxicity (oral)</th>
<th>Acute toxicity (dermal)</th>
<th>Acute toxicity (inhalation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not classified</td>
<td>Not classified</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water (7732-18-5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat : &gt; 90 ml/kg</td>
</tr>
<tr>
<td>Skin corrosion/irritation : Causes severe skin burns. pH: &lt; 1</td>
</tr>
<tr>
<td>Serious eye damage/irritation : Causes serious eye damage. pH: &lt; 1</td>
</tr>
<tr>
<td>Respiratory or skin sensitization : Not classified</td>
</tr>
<tr>
<td>Germ cell mutagenicity : Not classified</td>
</tr>
<tr>
<td>Carcinogenicity : Not classified</td>
</tr>
<tr>
<td>Reproductive toxicity : Not classified</td>
</tr>
<tr>
<td>STOT-single exposure : Not classified</td>
</tr>
<tr>
<td>STOT-repeated exposure : Not classified</td>
</tr>
<tr>
<td>Aspiration hazard : Not classified</td>
</tr>
<tr>
<td>Symptoms/effects after inhalation : May cause irritation to the respiratory tract. Overexposure may cause: Coughing. Headache. Nausea.</td>
</tr>
<tr>
<td>Symptoms/effects after skin contact : Causes (severe) skin burns.</td>
</tr>
<tr>
<td>Symptoms/effects after eye contact : Causes serious eye damage.</td>
</tr>
<tr>
<td>Symptoms/effects after ingestion : May be harmful if swallowed.</td>
</tr>
</tbody>
</table>

SECTION 12: Ecological information

12.1. Toxicity
No additional information available

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available
3-(TRIHYDROXYSILYL)-1-PROPANESULFONIC ACID, 30-35% in water

Safety Data Sheet

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
Effect on the ozone layer : No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods
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
UN-No.(DOT) : 3265
DOT NA No : UN3265

14.2. UN proper shipping name
Transport document description (DOT) : UN3265 Corrosive liquid, acidic, organic, n.o.s. (3-(TRIHYDROXYSILYL)-1-PROPANESULFONIC ACID), 8, III
Proper Shipping Name (DOT) : Corrosive liquid, acidic, organic, n.o.s.
(3-(TRIHYDROXYSILYL)-1-PROPANESULFONIC ACID)
Class (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136
Packing group (DOT) : III - Minor Danger
Hazard labels (DOT) : 8 - Corrosive

DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
DOT Packaging Bulk (49 CFR 173.xxx) : 241
DOT Packaging Exceptions (49 CFR 173.xxx) : 154
DOT Symbols : G - Identifies PSN requiring a technical name

14.3. Additional information
Emergency Response Guide (ERG) Number : 153
Other information : No supplementary information available.

Transport by sea
DOT Vessel Stowage Location : A - The material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other : 40 - Stow “clear of living quarters”

Air transport
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L

SECTION 15: Regulatory information

15.1. US Federal regulations

3-(Trihydroxysilyl)-1-propanesulfonic acid (70942-24-4)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Water (7732-18-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
3-(TRIHYDROXYSILYL)-1-PROPANESULFONIC ACID, 30-35% in water
Safety Data Sheet

15.2. International regulations

CANADA

3-(Trihydroxysilyl)-1-propanesulfonic acid (70942-24-4)
Listed on the Canadian NDSSL (Non-Domestic Substances List)

Water (7732-18-5)
Listed on the Canadian DSL (Domestic Substances List)
WHMIS Classification: Uncontrolled product according to WHMIS classification criteria

EU-Regulations

No additional information available

Water (7732-18-5)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

3-(Trihydroxysilyl)-1-propanesulfonic acid (70942-24-4)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Water (7732-18-5)
Listed introduction on Australian Industrial Chemicals Introduction Scheme (ACIS Inventory)
Listed on IECCSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Full text of H-phrases:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage</td>
</tr>
</tbody>
</table>

Hazard Rating

Health: 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

Flammability: 0 Minimal Hazard - Materials that will not burn

Physical: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Prepared by safety and environmental affairs.

Issue date: 01/09/2015             Revision date: 02/23/2022             Version: 1.2

SDS US (GHS HazCom 2012) - Custom

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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.

© 2020 Gelest Inc. Morrisville, PA 19067