

TCI AMERICA SAFETY DATA SHEET

Revision number: 1 **Revision date: 07/06/2018**

1. IDENTIFICATION

Product name: Vinylsulfonic Acid

Product code: V0134

For laboratory research purposes. Product use: Restrictions on use: Not for drug or household use.

Company: TCI America

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Emergency telephone number:

Chemical Emergencies:

TCI America (8:00am - 5:00pm) PST

+1-503-286-7624

Transportation Emergencies: Chemtrec 24-Hour +1-800-424-9300 (U.S.A.)

+1-703-527-3887 (International) Responsible department:

TCI America

Environmental Health Safety and Security

+1-503-286-7624

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200: Corrosive to Metals [Category 1]

WHMIS 2015: Skin Corrosion/Irritation [Category 1B]

Signal word: Danger!

Hazard Statement(s): May be corrosive to metals

Causes severe skin burns and eye damage

Pictogram(s) or Symbol(s):



Precautionary Statement(s):

Keep only in original container. Do not breathe dusts or mists. Wash hands and face thoroughly after [Prevention] handling. Wear protective gloves, protective clothing, face protection.

If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor. If on [Response] skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a poison center or doctor. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present

material damage.

Store in corrosive resistant bottle or metal container with a resistant inner liner. Store locked up. [Storage] Dispose of contents and container in accordance with local, regional, national regulations (e.g. US: 40 [Disposal]

CFR Part 261, EU:91/156/EEC, JP: Waste Disposal and Cleaning Act, etc.).

and easy to do. Continue rinsing. Immediately call a poison center or doctor. Absorb spillage to prevent

Hazards not otherwise classified:

[HNOC]

May cause polymerization.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance Components: Vinylsulfonic Acid Percent: >97.0%(T) 1184-84-5 CAS RN: Molecular Weight: 108.11 **Chemical Formula:** $C_2H_4O_3S$

Vinylsulfonic Acid **TCI AMERICA** Page 2 of 5

4. FIRST-AID MEASURES

Description of first aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a

POISON CENTER or doctor/physician.

Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Skin contact:

Immediately call a POISON CENTER or doctor/physician.

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Eve contact:

Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.

Symptoms/effects:

Ingestion:

No data available Acute: Delayed: No data available

Indication of any immediate medical attention:

Not available. Notes to physician: No data available

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Dry chemical, foam, water in large amounts, carbon dioxide.

Specific hazards arising from the

chemical:

This substance may polimerize explosively when heated or involved in a fire. Container may explode when heated. Combat fire from a sheltered position. Take care as it may decompose upon combustion

or in high temperatures to generate poisonous fume. These products include: Carbon oxides Sulfur oxides

Hazardous combustion products:

Other specific hazards:

Hazardous polymerization may take place during a fire due to heat. Closed containers could violently

Advice for firefighters: Wear self-contained breathing apparatus if possible.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off,

Environmental precautions:

Methods and materials for containment

and cleaning up:

Prevent product from entering drains.

Absorb spilled material in dry sand or inert absorbent before recovering it into a covered container. In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be

promptly disposed of, in accordance with appropriate laws and regulations.

7. HANDLING AND STORAGE

Precautions for safe handling: Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent

generation of vapour or mist. Wash hands and face thoroughly after handling.

Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated.

Avoid contact with skin, eyes and clothing.

Use corrosive resistant equipment.

Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container tightly closed. Store in a refrigerator.

Store locked up.

Store away from incompatible materials such as oxidizing agents.

Heat-sensitive Light-sensitive

Packaging material: Comply with laws. Keep only in original container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed Appropriate engineering controls:

system or local exhaust. Also install safety shower and eye bath.

Personal protective equipment

Respiratory protection: Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc.

Use respirators approved under appropriate government standards and follow local and national

regulations.

Hand protection: Impervious gloves.

Safety goggles. A face-shield, if the situation requires. Eye protection:

Skin and body protection: Impervious protective clothing. Protective boots, if the situation requires. Vinylsulfonic Acid TCI AMERICA Page 3 of 5

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Liquid Form: Clear

Colour: Pale yellow - Reddish yellow

Odour:No data availableOdor threshold:No data availableOdour threshold:No data available

Melting point/freezing point: No data available pH: No data available Boiling point/range: 115°C /0.100kPa (239°F) Vapour pressure: No data available. **Decomposition temperature:** No data available Vapour density: No data available Dynamic Viscosity: Relative density: 1.40 No data available

Kinematic viscosity: No data available

Log Pow: No data available Evaporation rate(Butyl No data available

Acetate=1):

Flash point: 159°C (318°F) Autoignition temperature: No data available

Flammability(solid, gas): No data available Flammability or explosive limits:

Lower: No data available Upper: No data available

Solubility(ies):

[Water] No data available [Other solvents] No data available

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: Polymerization may occur under the influences of heat, light or on contact with polymerization initiators

such as peroxides etc.

Possibility of hazardous reactions: No special reactivity has been reported.

Conditions to avoid: Heat, Light

Incompatible materials: Oxidizing agents, Bases

Hazardous decomposition products: Carbon dioxide, Carbon monoxide, Sulfur oxides

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

No data available

Skin corrosion/irritation:

No data available

Serious eye damage/irritation:

No data available

Respiratory or skin sensitization:

No data available

Germ cell mutagenicity:

No data available

Carcinogenicity:

No data available

IARC: No data available NTP: No data available OSHA: No data available

Reproductive toxicity:

No data available

Target organ(s): No data available

Vinylsulfonic Acid TCI AMERICA Page 4 of 5

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Fish: No data available
Crustacea: No data available
Algae: No data available

Persistence / degradability: Bioaccumulative potential(BCF):

Mobility in soil

No data available No data available

No data

Log Pow: No data available
Soil adsorption (Koc): No data available
Henry's Law (PaM ³/mol): No data available

13. DISPOSAL CONSIDERATIONS

Disposal of product:

Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not

Packing Group:

be allowed to enter the environment, drains, water ways, or the soil. Dispose of as unused product. Do not re-use empty containers.

Disposal of container:
Other considerations:

Observe all federal, state and local regulations when disposing of the substance.

14. TRANSPORT INFORMATION

DOT (US)

UN number: Proper Shipping Name: Class or Division:

UN3265 Corrosive liquid, acidic, organic, n.o.s 8 Corrosive material II

<u>IATA</u>

UN number: Proper Shipping Name: Class or Division: Packing Group:

UN3265 Corrosive liquid, acidic, organic, n.o.s 8 Corrosive material II

IMDG

er:

UN UN3265 Proper Shipping Name: Class or Division: Packing Group:

numb Corrosive liquid, acidic, organic, n.o.s 8 Corrosive material II

EmS number: F-A, S-B

VinyIsulfonic Acid TCI AMERICA Page 5 of 5

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):

This product is NOT on the EPA Toxic Substances Control Act (TSCA) inventory. The following notices are required by 40 CFR 720.36 (C) for those products not on the inventory list:

- (i) These products are supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR 720.0 et sec.
- (ii) The health risks of these products have not been fully determined. Any information that is or becomes available will be supplied on a SDS sheet.

US Federal Regulations

CERCLA Hazardous substance and Reportable Quantity:

SARA 313: Not Listed SARA 302: Not Listed

State Regulations

State Right-to-Know

MassachusettsNot ListedNew JerseyNot ListedPennsylvaniaNot ListedCalifornia Proposition 65:Not Listed

Other Information

NFPA Rating:
Health: 3
Flammability: 0
Instability: 0
Physical: 0

International Inventories

16. OTHER INFORMATION

Revision date: 07/06/2018 Revision number: 1

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.