

Section 1. Product and Company Identification

Product Identification: CCV-1 Solution B
SDS Number: CCV-1 Solution B
Recommended Use: For Laboratory Use
Company Identification: High-Purity Standards
P.O. Box 41727
Charleston, SC 29423
Telephone: (843) 767-7900
FAX: (843) 767-7906

In case of emergency call INFOTRAC: 800-535-5053

Section 2. Hazard Identification**Classification:**

None

Labeling:

Symbol: None

Signal Word: None

Hazard Statement: None

Precautionary Statement: None

Section 3. Composition

Component	CAS/EINECS Registry #	Percent Concentration
Sodium Silicate (Na_2SiO_3)	1344-09-8/239-981-7	0.050 (as Si)
Sodium Silicate (Na_2SiO_3)	1344-09-8/239-981-7	0.081 - 0.082 (as Na)
Sulfuric Acid (H_2SO_4)	7664-93-9/321-639-5	0.050 (as S)
Water, deionized	7732-18-5/231-791-2	Balance

Section 4. First Aid Measures

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Call a physician if irritation develops.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a physician. May cause nausea, vomiting, and diarrhea.

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

Target Organs: Eyes, skin.

Section 5. Fire Fighting Measures

Fire & Explosion hazards: Although sulfuric acid is a negligible fire hazard, it is an oxidizer and may explode on contact with combustible materials. However, the risk is reduced due to the lower concentration of sulfuric acid.

Extinguishing Media: Use any extinguishing media that is suitable for the surrounding area.

Specific Methods: Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode.

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Section 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Do not allow to enter drainage systems or water ways. Always dispose of in accordance with local regulations.

Section 7. Handling and Storage

Store in a cool, dry, ventilated storage area with acid resistant floors and good drainage. Keep out of direct sunlight and away from heat, water, and incompatible materials. When diluting, the acid should always be added slowly to water and in small amounts. Refer to Section 8 for personal handling instructions.

Section 8. Exposure Controls and Personal Protection

Engineering Controls: Provide general and local (e.g., fume hood) ventilation systems to maintain airborne concentrations below the TLV. Ensure the availability of eyewash stations and safety showers.

Personal Protection: Wear proper gloves, safety glasses with side shields, lab coat/apron.

Exposure Limits:

Component	ACGIH TLV	OSHA PEL
Sodium Silicate	Not Available	Not Available
Sodium Silicate	Not Available	Not Available
Sulfuric Acid	5 mg/m ³	1 mg/m ³
Water, deionized	Not Available	Not Available

Section 9. Physical and Chemical Properties

Physical State: Liquid

Color: Clear, colorless liquid

Odor: Odorless to a faint pungent odor

Odor threshold: None

pH: 4-5

Melting point: N/A

Freezing Point: N/A

Boiling Point: Approximately 100°C

Flash point: N/A

Evaporation rate: N/A

Flammability: N/A

Explosion limits: N/A

Vapor Pressure (mm): N/A

Vapor Density (air+1): N/A

Relative density: (H₂O = 1): Approximately 1.0

Solubility in H₂O: Complete

Auto ignition temperature: N/A

Decomposition temperature: N/A

Molecular Weight: N/A

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Section 10. Stability and Reactivity

Stability Indicator: YES

Conditions to Avoid: Incompatibles

Incompatibles: Strong acids, metals such as aluminum, lead, tin and zinc.

Hazardous Decomposition Products: None expected.

Hazardous Polymerization: Does not polymerize.

Section 11. Toxicological Information

May affect skin, mucous membranes and eyes. Swallowing may lead to a negative effect on mouth and throat and to the risk of perforation or the corrosion of esophagus and stomach. .

Toxicity Data:

RTECS#

Na₂SiO₃:1002947SS

H₂SO₄:WS5600000

LD₅₀ Ingestion, Dog (Sodium Silicate): 250 mg/kg

LD₅₀ Oral, Rat: (Sulfuric Acid) 2140 mg/kg

LC₅₀ Inhalation, Rat: (Sulfuric Acid) 510 mg/m³/2H, no toxic effect noted

Section 12. Ecological Information

Ecotoxicological information: Biodegradability (Na₂SiO₃): LC₅₀ 96 hrs fish 3185mg/L; EC₅₀ 96 hrs Daphnia 247 mg/L.

Section 13. Disposal Considerations

General: Follow Federal, state and local regulations for waste.

Section 14. Transport Information

D.O.T. Classification: Not hazardous by DOT.

Section 15. Regulations (Not meant to be all inclusive-selected regulation listed)

TSCA Status: The components of this solution are listed on the TSCA Inventory.

RCRA Status: No.

SARA: No.

WHMIS Information (Canada): Not available.

Section 16. Other Information

HPS products are intended for laboratory use only. All products should be handled and used by trained professional personnel only. The responsibility for the safe handling and use of these products rests solely with the buyer and/or user. The SDS was prepared carefully and represents the best data currently available to us; however, HPS does not certify the data on the SDS. Certified values for this material are given only on the Certificate of Analysis.

Theodore C. Rains, Ph.D.