

# Material Safety Data Sheet

## Section 1. Product and Company Identification

Product Identification: TCLP-EF  
MSDS Number: TCLP-EF  
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:**

Acute Toxicity, Inhalation (Category 5)  
Acute Toxicity, Dermal (Category 5)

**Labeling:**

**Symbol:** None

**Signal Word:** Warning

**Hazard Statement:** May be harmful in contact with skin. May be harmful if inhaled.

**Precautionary Statement:** Call a POISON CENTER or doctor/physician if you fell unwell.

## Section 3. Chemical Composition

Component	CAS/EINECS Registry #	Percent Concentration
Acetic Acid	64-19-7/200-580-7	28-29
Sodium Hydroxide	1310-73-2/215-185-5	12-13
Water, deionized	7732-18-5/231-791-2	Balance

*Note: \*\*this mixture forms a sodium acetate buffer pH 5-6\*\**

## Section 4. First Aid Measures

Emergency Overview: May cause irritation. Wash areas of contact with water.

Target Organs: Teeth, kidney

Inhalation: Remove to person into fresh air.

Ingestion: May be harmful if swallowed. Ingestion may cause abdominal pain or vomiting. Do not induce vomiting. Rinse mouth with water. Consult a physician.

Eyes: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin: Take off contaminated clothing and shoes immediately. Wash off with soap and water. Consult a physician.

## Section 5. Fire Fighting Measures

Fire & Explosion hazards: May produce flammable vapor. Vapor may travel considerable distance to source of ignition and flash back. Container explosion may occur under fire conditions.

Extinguishing Media: Alcohol foam, water spray, carbon dioxide, or dry chemical powder.

Specific Methods: Firefighters should wear proper protective equipment and self-contained breathing apparatus. Emits toxic fumes under fire conditions.

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#### Section 6. Accidental Release Measures

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment. Isolate hazard area. Collect liquid or absorb with an inert material, place in a covered container using non-sparking tools, and transport outdoors. Use water spray to reduce vapors. Prevent entry into sewers, basements, or confined areas.

#### Section 7. Handling and Storage

Handling: Keep away from heat sparks and flame. Keep container closed. Do not get in eyes, on skin, or on clothing. Avoid breathing vapors or spray mist.  
Storage: Keep container in a cool, dry, well ventilated area away from any area where fire hazard may be acute.

#### Section 8. Exposure Controls and Personal Protection

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentration of vapors below their threshold limit value. Ensure that eyewash stations and safety showers are proximal to the workstation location. Use non-sparking tools.

Respiratory Protection: Vapor respirator. Wear appropriate respirator when ventilation is inadequate.

Personal Protection: Wear proper gloves, safety goggles, lab coat/apron.

<b>Component</b>	<b>ACGIH TLV</b>	<b>OSHA PEL</b>
Acetic Acid	10 ppm	10 ppm
Sodium Hydroxide	200 ppm	200 ppm

#### Section 9. Physical and Chemical Properties

Physical State: Liquid  
Color: Clear, colorless liquid  
Odor: Faint pungent odor  
Odor threshold: None  
pH: 5-6  
Melting point: N/A  
Freezing Point: N/A  
Boiling Point: N/A  
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: (H<sub>2</sub>O = 1): N/A  
Solubility in H<sub>2</sub>O: 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: Stable under recommended storage conditions  
Conditions to Avoid: Heat, flame, ignition sources, and incompatibles  
Incompatibles: Oxidizing agents and alkali metals.  
Hazardous Decomposition Products: CO, CO<sub>2</sub>  
Hazardous Polymerization: Will not occur.

#### Section 11. Toxicological Information

RTECS#

Acetic Acid- AF1225000

Sodium Hydroxide: WB4900000

##### **Toxicity Data**

LD50: Oral, rat: (Acetic Acid) 3,310 mg/kg; LC50 Inhalation, mouse: (Acetic Acid) 1 h 5620 ppm; LD50 Dermal, Rabbit: (Acetic Acid) 1,112 mg/kg

#### Section 12. Ecological Information

Ecotoxicological information: This material is expected to be slightly toxic to aquatic life.

#### Section 13. Disposal Considerations

Contact your local permitted waste disposal site for permissible treatment sites. Always contact the permitted waste disposal site to assure compliance with all current local, state, and federal regulations.

#### Section 14. Transport Information

D.O.T. Classification: Not Hazardous by DOT regulations (based on pH).

#### 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

Safety Phrases: S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

WHMIS Information (Canada): Uncontrolled product.

#### 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.