



## Material Safety Data Sheet

Date revised: 9-01-08

### Section 1 Contact Information

ProHisto, LLC  
7001 St. Andrews Rd.  
Ste. 333  
Columbia, SC 29212  
803-407-0506

### Identification of the Substance

Catalog number: AA5, AA6  
Product name: Epitope Unmasking Solution

### Section 2 Composition of Ingredients

#### Hazardous/Non-Hazardous Components

This product contains no substances which at their final concentration, are considered to be hazardous to health.

This product is composed of a citric acid anhydrous (10% or less) based buffer solution.

### Section 3 Hazards Identification

Chemical name: citric acid anhydrous  
Synonyms: 2-hydroxy,1,2,3-tricarboxylic acid.

#### Emergency Overview

This product contains no substances which at their final concentration, are considered to be hazardous to health.

**Routes of Entry:** Absorbed through skin. Eye contact. Inhalation. Ingestion.

#### Potential Health Effects:

**Eyes:** Not available.  
**Skin:** Not available.  
**Inhalation:** Not available.  
**Ingestion:** Not available.

#### Specific Effects:

**Carcinogenic effects:** Not available.  
**Mutagenic effects:** Not available.  
**Reproductive toxicity:** Not available.  
**Sensitization:** Not available.  
**Target Organ Effects:** Not available.

### Section 4

#### First Aid Measures

**Skin contact:** Wash off with water.  
**Eye contact:** Rinse thoroughly with water, preferably at an eye wash station.  
**Ingestion:** Immediately contact medical professional. If victim is conscious and alert, give 2-4 cupfuls of water or milk. Never give anything by mouth to an unconscious person.  
**Notes to physician:** Not available.

### Section 5

#### Fire-Fighting Measures

**Suitable extinguishing material:** Dry chemical

**Special protective equipment for fire-fighters:** Wear self-contained breathing apparatus and protective suit.

---

## Section 6

### Accidental Release Measures

**Personal Precautions:** Use self-contained breathing apparatus and full protective clothing.

**Method for cleaning spill:** Soak with inert absorbent material. Flush spill area with water.

---

## Section 7

### Handling and Storage

**Handling:** Use with adequate ventilation. Remove contaminated clothing and wash before reuse. Avoid contact with skin, eyes, and clothing.

**Storage:** Store at 4°C in properly labeled container away from incompatible substances.

---

## Section 8

### Exposure Controls and Personal Protection

**Engineering controls:** Ensure adequate ventilation is available. Ensure eyewash stations and safety showers are proximal to work-station locations.

#### Personal Protection:

**Eyes:** Splash goggles or safety glasses with side shields.

**Body:** Lab coat.

**Hands:** Latex or nitrile gloves.

**Respiratory:** Respirator is not needed if exposure is kept below established limits.

---

## Section 9

### Physical and Chemical Properties

#### General Information

**Form:** Liquid

#### Health Safety and Environmental Information

**Boiling point/range:** No data available.

**Melting point/range:** No data available.

**Flash point:** No data available.

**Auto ignition temperature:** No data available.

**Oxidizing properties:** No data available.

**Water solubility:** Soluble.

---

## Section 10

### Stability and Reactivity

**Stability:** Stable.

**Materials to avoid:** Metallic nitrates and strong oxidizing agents.

**Hazardous decomposition products:** carbon monoxide, carbon dioxide.

**Polymerization:** Hazardous polymerization does not occur.

---

## Section 11

### Toxicological Information

#### Acute toxicity

#### Principle routes of exposure/Potential health effects

**Eyes:** Not available.

**Skin:** Not available.

**Inhalation:** Not available.  
**Ingestion:** Not available.

**Specific Effects**

**Carcinogenic effects:** Not available.  
**Mutagenic effects:** Not available.  
**Reproductive toxicity:** Not available.  
**Sensitization:** Not available.

**Target Organ effects:** No data available.

**Note on toxicological effects on humans**

To the best of our knowledge, the toxicological properties of this product have not been thoroughly investigated.

---

**Section 12**

**Ecological Information**

**Ecotoxicity:** No data available.  
**Mobility:** No data available.  
**Biodegradation:** No data available.  
**Bioaccumulation:** No data available.

---

**Section 13**

**Disposal Considerations**

**Disposal of in accordance to local, state, and federal regulations.**

---

**Section 14**

**Transport Information**

**IATA**

**Proper shipping name:** Not classified as dangerous in the meaning of transport regulations.  
**Hazard class:** No data available.  
**Subsidiary Class:** No data available.  
**Packing Group:** No data available.  
**UN-No:** No data available.

---

**Section 15**

**HCS Classification:**

**Irritating substance.**

**Target organ effects.**

**Label requirements (Europe)**

R20- Harmful by inhalation.  
R34- Causes burns.  
S1/2- Keep away from children.  
S26- In case of contact with eyes, rinse immediately with water and seek medical advice.  
S36/37- Wear suitable protective clothing and gloves.  
S39- Wear eye/ face protection.  
S45- In case of accident or if you feel unwell, seek medical advice.  
S46- If swallowed, seek medical advice immediately.

U.S. Federal Regulations:

TSCA 8(b) inventory: Tris-Hcl; Tween-20, DIUF Water.

The information above is believed to be accurate and represents the best information currently available. ProHisto,LLC does not make any warranty of merchantability or any other warranty, express or implied, with respect to such information, and assumes no liability resulting from its use.