

## 1. Product and Company Identification

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**Product(s)** ZD2 Citrate Plus (10X) HIER Solution  
ZD3 PBS Plus Tween 20 (20X) pH 7.6  
ZD4 TBS IHC Wash Buffer, 25X  
ZD5 Tris Plus Tween 20 (20X) pH 7.4  
ZD6 Tris-EDTA HIER Solution (10X) pH 9.0

**Related Product Kit** Not applicable

**Intended Use & Restrictions** Immunohistochemistry reagent intended for use by professional laboratory personnel that have been properly trained in its use.

**Company Information** Zeta Corporation  
65 N 1<sup>st</sup> Ave, Suite 202C  
Arcadia, CA 91006  
tel: (626) 355.2053  
fax: (626) 836.9149  
Email: [info@zeta-corp.com](mailto:info@zeta-corp.com)  
[www.zeta-corp.com](http://www.zeta-corp.com)

**24-Hour Emergency Contact** CHEMTREC  
+1 800-424-9300 (USA)

## 2. Hazards Identification

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**Emergency Overview** Clear, colorless liquid. Avoid prolonged exposure. Not flammable.

**OSHA Hazards** Irritant. Harmful by ingestion. Skin sensitizer.

**GHS Classification** Warning  
**Signal words, Symbol, Hazard & Precautionary Statements**



H302 Harmful if swallowed.  
H316 Causes mild skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

#### Potential Health Effects

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**Skin Contact** May be harmful if exposed to skin. May cause skin irritation, itching, redness or inflammation.

**Eye Contact** May be harmful if exposed to eyes. May cause eye irritation, watering eyes, stinging or burning sensation.

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation, headache, dizziness, nausea or coughing.

**Ingestion** May be harmful if swallowed. May cause irritation of gastrointestinal tract, nausea, or vomiting.

See Section 11: Toxicological Information for additional information.

**Environmental Effects** None identified.  
See Section 12: Ecological Information for additional information.

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### 3. Composition / Information on Ingredients

#### 3.2 Chemical Description: Mixture

Note: The buffer may contain non-hazardous proprietary ingredients and contain additional active ingredients at concentrations <0.1%v/v. Mixtures do not contain sodium azide but may contain other preservatives. These products do not contain other hazardous chemicals according to the Federal OSHA Hazardous Communication Standard (29 CFR 1910.1200) or the Globally Harmonized System of Classification and Labeling of Chemicals.

### 4. First Aid Measures

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**General Advice** Avoid further exposure to product. Consult a physician.

**In case of skin contact** Wash exposed area with soap and plenty of water. Remove any contaminated clothing. Seek medical attention.

**In case of eye contact** Wash eyes with plenty of water for at least 15 minutes. Have victim remove contact lenses. Be sure to wash under eyelids. Seek medical attention.

**If inhaled** Remove victim to well-ventilated area. If victim is not breathing, give artificial respiration. Seek medical attention.

**If swallowed** If victim is conscious, rinse mouth with water. Do not give anything to an unconscious victim. Seek medical attention.

### 5. Fire Fighting Measures

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**Suitable Extinguishing Media** Water spray, alcohol-resistant foam, dry chemical, or carbon dioxide. Use extinguisher media appropriate for surrounding fire.

**Special Protective Equipment for Firefighters** Wear self-contained breathing apparatus and protective clothing to prevent contact with eyes and skin.

**Special Exposure Hazards** None identified.

### 6. Accidental Release Measures

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**Personal Precautions** Use of personal protective equipment is recommended as described in Section

**Safety Data Sheet**

SDS Number: ZC20210101C

Buffer

Effective January 1, 2021

8. Isolate hazard area and deny entry to unprotected personnel.

**Environmental Precautions** Prevent further leakage or spillage if safe to do so. Keep out of drains, sewers, ditches and waterways.

**Methods for containment and clean up** Small spills may be contained and cleaned-up with paper towels or absorbent pads. Absorb large spills with sand or vermiculite and place in a closed container for waste disposal. Avoid physical contact during removal.

## **7. Handling and Storage**

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**Precautions for Safe Handling** Avoid contact with eyes, skin and clothing. Do not ingest. Wash hands thoroughly after use.

**Conditions for Safe Storage** Keep container tightly closed. Keep container in a cool, well-ventilated area.

## **8. Exposure Controls / Personal Protection**

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**Permissible Exposure Limits** Contains no substances with occupational exposure limit values.

**Engineering Controls** No special controls needed.

**Personal Protective Equipment** Contains no substances with occupational exposure limit values.

**Eye Protection** No special controls needed.

**Skin Protection** Wear chemical splash goggles and face shield when eye and face contact is possible due to splashing or spraying of material.

**Respiratory Protection** Use chemically resistant gloves and a lab coat with sleeves.

**General Hygiene Measures** Avoid contact with eyes, skin and clothing. Wash hands thoroughly after handling and before eating or drinking.

## **9. Physical and Chemical Properties**

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**Appearance** Clear, colorless solution.

**Odor** None

**pH (as supplied)** 7.4 as supplied

**Melting point** Not determined.

**Boiling point** Not determined.

**Flash point** Not determined.

**Flammability** Not determined.

**Lower explosion limit** Not determined.

**Upper explosion limit** Not determined.

**Vapor pressure** Not determined.

**Vapor density** Not determined.

**Specific gravity** Not determined.

**Solubility (in water)** Soluble.

**Partition coefficient (n-octanol/water)** Not determined.

**Auto-ignition temperature** Not determined.

**Decomposition Temperature** Not determined.

## 10. Stability and Reactivity

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**Chemical Stability** Stable under recommended storage conditions (see Section 7).

**Conditions to avoid** None identified.

**Materials to avoid** Strong oxidizing agents, amines, mercaptans, reducing agents.

**Hazardous decomposition products** Hazardous decomposition products formed under fire conditions: carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen chloride gas.

**Possibility of hazardous reactions** No data available.

## 11. Toxicological Information

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**Acute dose effects** Tris Base: LD50 (rat), 5900 mg/kg  
Proclin 950: LD50 Oral (rat, female), 1091 mg/kg  
Proclin 950: LD50 Oral (rat, male), 2834 mg/kg  
Proclin 950: LD50 Dermal (rabbit), >5000 mg/kg  
Tween 20: LD50 Oral (rat) – 40,554 mg/kg

**Repeat dose effects** No data available.

**Skin irritation** Proclin 950: Rabbit, Causes severe burns.  
Tween 20: Human, Mild skin irritation, 3 days.

**Skin and respiratory sensitization** Proclin 950: Guinea pig, May cause allergic skin reaction.

**Eye irritation** Proclin 950: Rabbit, Corrosive.

**Carcinogenicity** No component of this product present at levels greater than or equal to 0.1% is identified as a probable, possible, potential, known, anticipated, or confirmed carcinogen by IARC, ACGIH, NTP, or OSHA.

**Mutagenicity** No data available.

**Reproductive effects** No data available.

**Developmental effects** No data available.

**Target organ effects** No data available.

*To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated at product concentrations.*

## 12. Ecological Information

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**Ecotoxicity** No data available

**Persistence and degradability** No data available

**Bioaccumulation/accumulation** No data available

**Mobility in environmental media** No data available

**Other hazardous effects** No data available

### **13. Disposal Considerations**

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**Product** Disposal should be in accordance with applicable national, state, and local laws and regulations. Local regulations may be more stringent than national or state requirements. Verify local and state regulations before discharging into public sewers or landfills. Do not dump into any body of water. Contact a licensed professional waste disposal service for appropriate methods of disposal.

**Contaminated packaging** Dispose of as unused product.

### **14. Transportation Information**

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**Proper shipping name** Not applicable

**Technical name** Not applicable

**Hazard class** Not applicable

**Identification number** Not applicable

**Packing group** Not applicable

**DOT (US)** Not regulated

**IMDG** Not regulated

**IATA** Not regulated

**TDG** Not regulated

### **15. Regulatory Information**

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#### **Inventory Status**

**United States (TSCA)** All ingredients are on the inventory or exempt from listing.

**Canada (DSL / NDSL)** All ingredients are on the inventory or exempt from listing.

**SARA 302 Components** No chemicals in this product are subject to reporting requirements.

**SARA 313 Components** No chemicals in this product are subject to reporting requirements.

**SARA 311/312 Hazards** Proclin 950: Acute health hazard

**California Prop. 65 components** This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

### **16. Other Information**

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**Sources and Suitability** The above information was obtained from sources available at the time of revision and believed to be accurate and reliable. The information included is not intended to be all inclusive and should only be used as a guide. Biocare shall not be held liable for any damage resulting from use, handling, or contact with the above product.

**Note: Before using this product, please visit the Zeta Corporation website at <http://zeta-corp.com> for the current version of this SDS.**