Control Number: 907-026 I.E.D Unit (Ion-Exchange Decal Unit), (IED1203, IED1204) May 16, 2022



1. Product and Company Identification

Product(s)	I.E.D. Unit (Ion-Exchange Decal Unit), (IED1203, IED1204)
Related Product Kit	N/A
	Immunohistochemistry reagent intended for use by professional laboratory personnel that have been properly trained in its use.
Company Information	Biocare Medical, LLC 60 Berry Drive Pacheco, CA 94553 United States Tel: +1 800-799-9499 (7AM–5PM, PST, Mon-Fri) Fax: +1 925-603-8080 Web: www.biocare.net
24-Hour Emergency Contact	CHEMTREC +1 800-424-9300 (USA and Canada only) +1 703-527-3887 (all other countries)

2. Hazards Identification

 Emergency Overview
 Corrosive solution will cause acid burns to skin and damage to eyes. Avoid directly inhaling fumes.

 OSHA Hazards
 Corrosive, Harmful by ingestion

 GHS Classification signal words, Symbol, Hazard & Precautionary statements
 Image: Corrosive solution will cause acid burns to skin and damage to eyes. Avoid directly inhaling fumes.

GHS07

Danger

GHS05

Skin corrosion (Category 1B), Serious eye damage (Category 1), Acute Toxicity (4), STOT SE (3), Flammable Liquid (4)

<u>Hazard Statements</u> H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H302 Harmful if swallowed. H335 May cause respiratory irritation. H227 Combustible liquid.

Precautionary Statements

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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Potential Health Effects	
Skin Contact	Harmful if absorbed through skin. Causes skin burns.
Eye Contact	Causes eye burns.
Inhalation	May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Ingestion	Harmful if swallowed. May cause irritation of gastrointestinal tract, nausea, or vomiting.
	See Section 11: Toxicological Information for additional information.
Environmental Effects No See	ne identified. Section 12: Ecological Information for additional information.

3. Composition / Information on Ingredients

Chemical Name	Synonyms	% Composition	CAS Number
Hydrochloric acid	Muriatic acid	5-10%	7647-01-0
Formic acid	N/A	5-10%	64-18-6
Proprietary ion-exchange resin	N/A	<5%	N/A

Note: It has been determined that the remaining ingredients of this product are not classified as hazardous 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

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

5. Fire Fighting Measures

Suitable Extinguishing Media	Water spray, alcohol-resistant foam, or carbon dioxide. Use extinguisher media appropriate for surrounding fire.
	Wear self-contained breathing apparatus and protective clothing to prevent contact with eyes and skin.
Special Exposure Hazards	Hydrogen chloride gas is a potential decomposition product under fire conditions. Avoid inhalation of fumes, which may be toxic or irritating.

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6. Accidental Release Measures

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

Precautions for Safe Handling	Avoid contact with eyes, skin and clothing. Avoid inhalation of vapors. 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

Permissible Exposure Limits	Hydrochloric acid, ACGIH, Ceiling, 2 ppm. Hydrochloric acid, OSHA, Ceiling, 5 ppm, 7 mg/m ³ . Formic acid, ACGIH, TWA, 5 ppm. Formic acid, ACGIH, STEL, 10 mg/m ³ . Formic acid, OSHA, TWA, 5 ppm, 9 mg/m ³ .
Engineering Controls	Use of a chemical fume hood is recommended.
Personal Protective Equipment	
Eye Protection	Wear chemical splash goggles and/or face shield as eye and face contact is possible due to splashing or spraying of material.
Skin Protection	Use chemically resistant gloves and a lab coat with sleeves.
Respiratory Protection	If irritating vapors are produced, respiratory protection and a chemical fume hood are recommended. Attempt to reduce exposure levels to an acceptable range.
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

Appearance	Clear, colorless solution with golden colored beads.
Odor	Not determined
pH (as supplied)	<1
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

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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

Chemical Stability	Stable under recommended storage conditions (see Section 7).
Conditions to avoid	Keep away from incompatible materials.
Materials to avoid	Bases, amines, metals, oxidizing agents, permanganate (e.g. potassium permanganate).
•	Hazardous decomposition products formed under fire conditions: carbon monoxide, carbon dioxide, hydrogen chloride gas.
Possibility of hazardous reactions	None identified.

11. Toxicological Information

Acute dose effects	Hydrochloric acid: LD50 (oral, rabbit) 900 mg/kg Formic acid: LD50 (oral, rat) 1100 mg/kg Formic acid: LC50 (inhalation, rat, 4h) 7.4 mg/L Formic acid: LC50 (inhalation, rat, 0.25h) 15,000 mg/L
Repeat dose effects	
•	Not determined
• •	Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals (Formic acid).
Eye irritation	Not determined
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	Not determined
Reproductive effects	Not determined
Developmental effects	Not determined
Target organ effects	Not determined

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

12. Ecological Information

Ecotoxicity Hydrochloric acid: LC50 (Gambusia affinis [Mosquito fish], 96 h) 282 mg/L

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Formic acid: LC50 (Leuciscus idus [Golden orfe], 96 h) 46-100 mg/L

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

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

Proper shipping name	Not applicable
Technical name	Not applicable
Hazard class	Not applicable
Identification number	Not applicable
Packing group	Not applicable
DOT (US)	Not dangerous goods
IMDG	Not dangerous goods
ΙΑΤΑ	Not dangerous goods
TDG	Not dangerous goods

15. Regulatory Information

Inventory Status	
United States (TSCA)	All components are listed or not subject to reporting requirements.
Canada (DSL / NDSL)	All components are listed or not subject to reporting requirements.
SARA 302 Components	No chemicals in this product are subject to reporting requirements.
SARA 313 Components	The following components are subject to the reporting requirements of SARA Title III, Section 313: Hydrochloric acid, 7647-01-0 Formic acid, 64-18-6
SARA 311/312 Hazards	Acute health hazard, chronic health hazard.
•	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.
Revision Date	January 22, 2018 (All SDS's before this date should be discarded.)
Replaces Revision	June 16, 2015. This SDS has been updated to reflect current hazard information and product formulations. Note: Before using this product, please visit the Biocare Medical website at http://biocare.net for the current version of this SDS.