

Millennium Signatures Marking Systems Inc.

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SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION AND COMPANY DETAIL

Product Name: X4R-418 Electrolyte
Product Code(s): X4R-418
Recommended Use: For use in the Electro-Chemical Etching Process
Manufacturers Name: Millennium Signatures Inc.
Address: 12-1550 Yorkton Court.
Burlington Ontario, L7P 5B7
Emergency Telephone: (905)639-0909, available during office hours, 7:30am - 4:00pm EST, Monday - Friday, in English.
Fax Number: (905)639-0919
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PPE [†]	
[†] Sec. 8	

SECTION 2 – HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components (specific chemical identity/ Common name):

SOLIDS:

LIQUIDS: Surfactant (TRADE SECRET) 1%

TRADE SECRET: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 3 – HAZARD INFORMATION

Inhalation: N/A
Ingestion: Can irritate G.I. Tract, nausea, vomiting diarrhea
Skin contact: Dermatitis may possibly be aggravated
Eye contact: N/A

SECTION 4 – FIRST AID MEASURES

Skin contact: Flush thoroughly with water for fifteen minutes.
Eye contact: Flush thoroughly with water for fifteen minutes.
Ingestion: Give emetic, and call physician.
Inhalation: N/A
Always seek medical attention if irritation continues.

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SECTION 5 – FIRE-FIGHTING MEASURES

Suitable extinguishing media: N/A
Special fire fighting procedures: N/A
Unusual fire and explosions hazards: N/A

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is released or spilled:

SMALL SPILLS: Flush with water to sewer.

LARGE SPILLS: Use suitable absorbent and dispose of in dot approved waste containers.

WASTE DISPOSAL: To be performed in compliance with all current local, state and federal regulations.

SECTION 7 – PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be taken in the event of spillage or chemical release:

Waste disposal method: To be performed in compliance with all current local, state and federal regulations.

Precautions to be taken in Handling and Storage: Keep container tightly closed, and keep from freezing (32°F).

Wash hands thoroughly after handling. **Other Precautions:** None

SECTION 8 – EXPOSURE CONTROLS – PERSONAL PROTECTION

Occupation Exposure Limits: N/A

Personal Protective Equipment:

Respiratory System: N/A

Skin and Body: Optional apron

Hands: Optional for sensitive skin, rubber gloves

Eyes: For extra protection, wear safety goggles

Other/Special: Local exhaust sufficient

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Color: Clear

Odor: Slight odor

Odor Threshold: N/A

pH: 1.9 to 2.3

Boiling Point: 212°F

Melting / Freezing Point: Melting - N/A Freezing - below 32°F

Flash Point: N/A

Fire Hazards in presence of various substances: N/A

Auto-ignition temperature: N/A

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Explosive Properties: N/A
Lower explosion limit: N/A
Oxidizing properties: N/A
Vapor Pressure (mm Hg.): @25°C (77°F):23.7
Evaporation Rate: N/A
Density: N/A
Solubility: Complete (100%)
Vapor Density: N/A

SECTION 10 – REACTIVITY DATA

Stability: STABLE
Conditions to avoid: N/A
Incompatibility: (materials to avoid) If solution dries; metal and alkaline
Hazardous Decomposition or By-products: Chlorine compounds
Hazardous polymerization: WILL NOT OCCUR.

SECTION 11 – TOXICOLOGICAL INFORMATION

Carcinogenicity: NTP: No IARC: No OSHA: No
Health Hazards (Acute & Chronic);
Can irritate G.I. tract
Nausea, vomiting, diarrhea
Dermatitis may possibly be aggravated

SECTION 12 – ECOLOGICAL INFORMATION

N/A

SECTION 13 – DISPOSAL CONSIDERATIONS

Observe all federal, state and local environmental regulations.

SECTION 14 – TRANSPORT INFORMATION

Keep container tightly closed and keep from freezing (32° F).

SECTION 15 – TRANSPORT INFORMATION

IRRITANT

Safety Phrases: N/A

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Risk Phrases: N/A
Regulations: N/A

SECTION 16 – OTHER INFORMATION

Source of key data used to

Compile Safety Data Sheet: Material Safety Data Sheet. Essentially similar to U.S. Department of Labor Form OSHA-20
Issue Date: 02 February 1987
Changes to Issue: March 7, 2016

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