

SAFETY DATA SHEET



SECTION 1 – IDENTIFICATION AND COMPANY DETAIL

Product Name: X-4 Electrolyte
Product Code(s): X-4
Recommended Use: For use in the Electro-Chemical Etching Process
Manufacturers Name: Monode Marking Products, Inc.
Address: 9200 Tyler Boulevard
Mentor, OH 44060

Emergency Telephone: (440) 975-8802, available during office hours,
8:00am - 5:00pm EST, Monday - Friday, in English.

Fax Number: (440) 975-8836
Date Prepared: 04 April 2015

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PPE [†]	
[†] Sec. 8	

SECTION 2 – HAZARDS IDENTIFICATION



Hazardous Pictogram:

Signal Word: **WARNING**

Precautionary Statement: Harmful if swallowed.
Do not swallow.
Avoid Skin and Eye contact.

Inhalation: N/A
Ingestion: Can irritate G.I. tract. Nausea, vomiting, diarrhea.
Skin contact: May cause irritation.
Eye contact: May cause irritation.

This product, when used specifically as directed and for its intended purpose (i.e. mild electrolytic etching) and in conjunction with proper work procedures and policies and sound hygienic practices, does not constitute a hazard to personnel.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Components (specific chemical identity/ Common name):

SOLIDS: None

LIQUIDS: None

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



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SECTION 4 – FIRST AID MEASURES

Skin contact: Wash thoroughly with soap and water.
Eye contact: Flush thoroughly with water for fifteen minutes.
Ingestion: Induce vomiting.
Inhalation: N/A

Always seek medical attention if irritation continues.

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 wear rubber gloves.

Eyes: Wear safety goggles.

Other/Special: Local exhaust sufficient



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SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid
Color: Clear
Odor: Slight odor
Odor Threshold: N/A
pH: 0.3 to 0.7
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
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; metals & alkalies.
Hazardous Decomposition or By-products: Due to external fire; 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 and diarrhea.

SECTION 12 – ECOLOGICAL INFORMATION

N/A

SECTION 13 – DISPOSAL CONSIDERATIONS

Observe all federal, state and local environmental regulations.



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SECTION 14 – TRANSPORT INFORMATION

Special Precautions: Keep container tightly closed. Keep from freezing (32 degrees [F]).

This is a Non-Hazardous product.

UN Number

US DOT (United States Department of Transportation): Not Regulated

IMO/IMDG (International Maritime Dangerous Goods): Not Regulated

IATA (International Air Transport Association): Not Regulated

ADR (Agreement on Dangerous Goods by Road (Europe)): Not Regulated

RID (Regulations Concerning The International Transport of Dangerous Goods (Europe)): Not Regulated

AND (European Agreement Concerning The Carriage of dangerous Goods by Inland Waterways): Not Regulated

SECTION 15 – TRANSPORT INFORMATION

IRRITANT

Safety Phrases: N/A

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: 15 May 1990

Changes to Issue: 04 January 2021

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