

SAFETY DATA SHEET



SECTION 1 – IDENTIFICATION AND COMPANY DETAIL

Product Name: F-60 Electrolyte
Product Code(s): F-60
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: 02 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 cause tissue destruction and kidney or liver failure may follow; can cause gastrointestinal disturbances. May cause facial discoloration, nausea and vomiting. Can be toxic.

Skin contact: May become sensitized, is corrosive to skin. Dermatitis may possibly be effected.

Eye contact: May cause severe eye damage or conjunctivitis or 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: Chromic Acid (trade secret) 6%
Mixed Nitrate Salts (trade secret) 7%

LIQUIDS: Formaldehyde (trade secret) 120ppm

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: Immediately wash with soap and water.
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.

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: Wash contaminated clothing thoroughly before reuse.

SECTION 8 – EXPOSURE CONTROLS – PERSONAL PROTECTION

Occupation Exposure Limits: N/A

Personal Protective Equipment:

Respiratory System: N/A

Skin and Body: Optional apron

Hands: Must wear rubber gloves.

Eyes: Wear safety goggles.

Other/Special: Local exhaust sufficient

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES



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Physical State: Liquid
Color: Red
Odor: Slight odor
Odor Threshold: N/A
pH: 0.53 to 0.93
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: Is a strong oxidizer.
Incompatibility: (materials to avoid) Reducing agents, combustible materials, oxidizers.
Hazardous Decomposition or By-products: None; But surrounding fire may produce oxides of nitrogen and chlorine gas.
Hazardous polymerization: Will not occur.

SECTION 11 – TOXICOLOGICAL INFORMATION

Carcinogenicity: NTP: * IARC: * OSHA: *

Health Hazards (Acute & Chronic);

Can cause tissue destruction and kidney or liver failure may follow; can cause gastrointestinal disturbances.
May cause severe eye damage or conjunctivitis or irritation.
Is corrosive to skin. Skin may become sensitized.
May cause facial discoloration and vomiting.
Can be toxic if ingested.
Dermatitis may possibly be aggravated.
*Chromic acid is considered to be a possible carcinogen by the NTP, IARC Monographs, and OSHA.

SECTION 12 – ECOLOGICAL INFORMATION

N/A



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SECTION 13 – DISPOSAL CONSIDERATIONS

Observe all federal, state and local environmental regulations.

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: 26 February 1987

Changes to Issue: 04 January 2021

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