Lectroetch Electrolyte LNC5

SECTION 1: IDENTIFICATION

Product Identifier:	**Lectroetch Electrolyte LNC5**
Other Means of Identification:	**N/A**
Recommended Use:	**Electrolytic Etching Solution**
Restrictions on Use:	**None known**
Supplier Identifier:	**Sterling Marking Products Inc., 349 Ridout Street North, London, ON Canada N6A 2N8 1-800-265-5957, 519-434-5785**
Emergency Phone Number:	**CANUTEC (613) 966-6666, Cellular *666**

SECTION 2: HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the U.S. Hazardous Communication Standard (HCS 2012)

Classificaton

Oxidizing Liquid – Category 2, H272
Skin Corrosive – Category 1A, H314
Eye Irritant – Category 2A, H319

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Label Elements:

Signal Word: Danger

Hazard Statements:

H272 May Intensify Fire; Oxidizer
H314 Causes Severe Skin Burns and Eye Damage
H319 Causes Serious Eye Irritation

Precautionary Statements:

Take any precaution to avoid mixing with combustibles
Do not breathe dust or mists
Keep away from heat
Keep container tightly closed
Wear protective gloves and eye protection
Wash hands and skin thoroughly after handling
Take off contaminated clothing and wash it before reuse.
If in eyes, flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur consult a physician, preferably an ophthalmologist.
If ingested, there is no specific antidote. Do not induce vomiting. Seek prompt medical attention.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Description: Mixture of substances listed below with non-hazardous additions

Dangerous Components:		
CAS: 77-92-9 RTECS: GE 7350000	 Citric Acid Eye Irritant 2A, H319;	15 - 35%
	 Trade Secret Oxidizing Solvent 3, H272 Eye Irritant 2A, H319	2 - 12%
	 Trade Secret Skin Irritant 2, H315; Eye Irritant 2A, H319	≤ 2.5%

Note: All ingredients are listed on the Domestic Substances List (DSL) and the Toxic Substances Control Act (TSCA) list.

SECTION 4: FIRST AID MEASURES

Eye Contact: Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur consult a physician, preferably an ophthalmologist.
Skin Contact: Immediately flush affected area with water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if irritation occurs. Remove contaminated clothing and launder before reuse. Discard contaminated leather articles such as shoes and belt.
Ingestion: Do **NOT** induce vomiting. Never give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.
Notes to Physician: No specific antidote. Treatment based on sound judgement of physician and individual reactions of patient. First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection).

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media:

Water spray, carbon dioxide, dry chemical, foam. Alcohol resistant foams (ATC type) are preferred if available. General purpose synthetic foams (including AFFF) or protein foams may function but much less effectively.

Specific Hazards arising from the Product:

Hazardous Decomposition/Combustion Materials (under fire conditions):

The smoke may contain unidentified toxic and/or irritating compounds. Carbon monoxide. Carbon dioxide, Nitrogen Oxides (NOx), Sulfur oxides, Hydrogen chloride gas, and Calcium Oxides.

Special Protective Equipment:

Fire fighters should wear full protective clothing including self-contained breathing equipment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures:

Wear appropriate protective equipment. Avoid contact with skin and eyes.

Environmental Precautionary Measures:

Prevent entry into sewers or streams, dike if needed. Dilute with plenty of water.

Procedure for Clean-up:

Small spills can be flushed with large amounts of water; larger spills should be collected for disposal. Absorb with an inert dry material and place in an appropriate waste disposal container.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling:

None required other than normal safe material handling procedures. Use in well-ventilated area.

Conditions for Safe Storage:

Keep containers tightly closed. Store away from strong acids, strong bases and strong oxidizing agents. Store in accordance with good industrial practice. Keep away from heat. Protect from heat and direct sunlight.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Appropriate Engineering Controls:

Personal Protective Equipment

Respiratory Protection: Ensure adequate ventilation/exhaustion at the workplace.

Gloves: Use gloves chemically resistant to this material. Examples of acceptable glove barrier materials include Natural rubber gloves. Neoprene gloves. Nitrile gloves. Polyvinylchloride (PVC) gloves. Viton gloves. **NOTICE:** the selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials as well as the instructions/specifications provided by the glove supplier.

Skin Protection: The selection of personal protective equipment varies depending upon conditions of use. Skin contact should be prevented through use of suitable protective clothing, gloves and footwear, selected for conditions of use and exposure potential. Consideration must be given both to durability as well as permeation resistance. Impervious clothing. Impervious boots.

Eyes: Chemical goggles; also wear a face shield if splashing hazard exists.

Other Personal Protection Data: Ensure that eyewash stations and safety showers are proximal to the work station location. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled clothing and wash before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.
Colour: Clear, colourless.
Odor: Slight.
pH at 20°C (68°F): 1.5
Boiling Point: 100°C/212°F.
Freezing/Melting Point: Not determined
Vapour Pressure: Not determined
Vapour Density: Not determined

% Volatile by Volume: Not Available.
Solubility: Not miscible or difficult to mix.
Molecular Weight: Not available.
Other: Not available.

SECTION 10: STABILITY AND REACTIVITY

Reactivity:
Not reactive.
Chemical Stability:
Stable.
Hazardous Polymerization:
Will not occur.
Conditions to Avoid:
Materials to Avoid:
Oxidizing materials. Strong acids or bases, strong oxidizing agents and strong reducing agents
Hazardous Decomposition Products:
Decomposition products can include and are not limited to: Carbon monoxide. Carbon dioxide, Nitrogen Oxides, Sulfur oxides, Hydrogen chloride gas, and Calcium Oxides.
Additional Information:
No additional remarks.

SECTION 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure:
Ingestion:
Low toxicity. Small amounts swallowed incidental to normal handling operations are not likely to cause injury. Swallowing larger amounts may cause injury.
Skin Contact: Strong caustic effect on skin and mucous membranes.
Inhalation: Brief exposure (minutes) is not likely to cause adverse effects.
Eye Contact: Irritating effect. Causes serious eye irritation.

Additional Information:

Acute Test of Product:

Ingredients	Route		
Trade Secret	Oral	LD50	3,900 mg/kg (rat)
Citric Acid (77-92-9)	Oral	LD50	5040 mg/kg (mouse) 5400 mg/kg (rat)
	Dermal	LD50	>2,000 mg/kg (rat)

Carcinogenicity:
Carcinogenicity Comment: IARC (international Agency for Research on Cancer) – Substance is not listed, none of the ingredients are listed.

NTP (National Toxicity Program) – None of the ingredients are listed.
OSHA-Ca (Occupational Safety & Health Administration) – None of the ingredients are listed.
Reproductive Toxicity/Teratogenicity/Embryotoxicity/Mutagenicity: None known.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological Information:
The hazards to the aquatic environment are unknown.
Other Information:
Ecotoxicity: material is practically non-toxic to aquatic organisms on an acute basis. Rinse off of bigger amounts into drains may increase pH-values which may harm aquatic organisms. Must not reach bodies of water or drainage ditches undiluted.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal of Waste Method: Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations.
Contaminated Packaging: Empty containers should be recycled or disposed of through an approved waste management facility. Water is the recommended cleansing agent if required.

SECTION 14: TRANSPORT INFORMATION

DOT (U.S.): UN3139
DOT Shipping Name: Lectroetch Electrolyte LNC5
DOT Hazardous Class: 5.1 Oxidizing Liquid
DOT UN Number: UN3139
DOT Packing Group: Non-Regulated Material Non-Regulated Material
DOT Reportable Quantity (lbs): Not available.
Note: Warning: Oxidizing Substances
Marine Pollutant: No.

TDG (Canada):
TDG Shipping Name: Lectroetch Electrolyte LNC2
Hazard Class: Non-Regulated Material
UN Number: UN3139
Packing Group: Non-Regulated Material
Note: Warning: Oxidizing Substances
Marine Pollutant: No.

SECTION 15: REGULATORY INFORMATION

U.S. TSCA Inventory Status: All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt.
Canadian DSL Inventory Status: All components of this product are either on the Domestic Substances List (DSL), the Non-Domestic Substances List (NDSL) or exempt.
Note: Not available.

U.S. Regulatory Rules:

California Proposition 65: Not Listed.
MA Right to Know List: Not Listed.
New Jersey Right-to-Know List: Not Listed.

Pennsylvania Right-to-Know List: Not Listed.

Classificaton
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Hazard Pictograms:

Description: Mixture of substances listed below with non-hazardous additions

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SECTION 16: OTHER INFORMATION

Additional Information: This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

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End of SDS.