Lectroetch Electrolyte LNC14

SECTION 1: IDENTIFICATION

Product Identifier:	**Lectroetch Electrolyte LNC14**
Other Means of Identification:	**N/A**
Recommended Use:	**General Purpose Electrolytic Etching Solution for marking ferrous alloys, stainless steels, and aluminum alloys**
Restrictions on Use:	**None known**
Supplier Identifier:	**Sterling Marking Products Inc., 1147 Gainsborough Road, London, ON Canada N6H 5L5 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 Globally Harmonized System.

Classificaton
Eye Irritant – Category 2B, H319, Causes serious eye irritation

Label Elements:

Signal Word: Danger

Hazard Statements:
H319, Causes serious eye irritation
Precautionary Statements:
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
Note: 6.2% of the mixture consists of component(s) of unknown toxicity.

Dangerous Components:		
CAS 77-92-9	 Citric Acid, Eye Irritant 2A, H319	10 – 15%

Note: All ingredients are listed on the Domestic Substances List (DSL) and the Toxic Substances Control Act (TSCA) list.
The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions for trade secrets.

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.

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:
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
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 and direct sunlight.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Occupational Exposure Limits
There are no components of the mixture that have a PEL, TLV or other recommended exposure limit.

Appropriate Engineering Controls:
Personal Protective Equipment
Respiratory Protection: Ensure adequate ventilation/exhaustion at the workplace.
Gloves: Check suitability of glove material prior to using the material for the application. **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): 3.0
Boiling Point: ≥100°C/212°F.
Flash Point: None
Flammability (solid, gaseous): Not applicable
Freezing/Melting Point: Not determined
Vapour Pressure: Not determined
Vapour Density: Not determined
% Volatile by Volume: Not Available.
Evaporation Rate: Not Available.
Solubility: Completely soluble.
Viscosity: As water
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:
The smoke may contain unidentified tox and/or irritating compounds.
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: Irritant to skin and mucous membranes.
Inhalation: Brief exposure (minutes) is not likely to cause adverse effects.
Eye Contact: Is an eye irritant.
Additional Information:

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

Dangerous Components:		
CAS	**Description**	**Toxicity**
CAS 77-92-9	 Citric Acid, Eye Irritant 2A, H319	LD_{50} - 5,040 mg/kg (oral, mouse), LD_{50} - 5,400 mg/kg (oral, rat), LD_{50} ->2,000 mg/kg (dermal, rat) LC_{50}/48h – 440 mg/l (Daphnia)

Carcinogenicity:
Carcinogenicity Comment: IARC (international Agency for Research on Cancer) – Cobalt Dichloride is possibly carcinogenic to humans

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: Category 1A, H360, May damage fertility or the unborn child (Cobalt Dichloride)

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological Information:
Description: Mixture of substances listed below with non-hazardous additions
Note: 6.2% of the mixture consists of component(s) of unknown toxicity.

Dangerous Components:		
CAS	**Description**	**Toxicity**
CAS 77-92-9	 Citric Acid, Skin irritant 2, H315, Eye Irritant 2A, H319	EC_{50} – 1,534 mg/l (Daphnia)

Other Information:
Ecotoxicity: Rinse off of bigger amounts into drains may increase pH-values which may harm aquatic organisms.
Very toxic for aquatic organisms.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal of Waste Method: Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations. Do not dispose of with household garbage. Do not allow product to reach sewage system.
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.): Non-Regulated Material
DOT Shipping Name: Lectroetch Electrolyte LNC14
DOT Hazardous Class: Non-Regulated Material
DOT UN Number: Non-Regulated Material
DOT Packing Group: Non-Regulated Material
DOT Reportable Quantity (lbs): Not available.
Note: No additional remarks.
Marine Pollutant:

TDG (Canada):
TDG Shipping Name: Lectroetch Electrolyte LNC-53NC
Hazard Class: Non-Regulated Material
UN Number: Non-Regulated Material
Packing Group: Non-Regulated Material
Note: No additional Remarks
Marine Pollutant:

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.

WHMIS Hazardous Class:
Eye irritation – Class D, Category 2B

Hazard Pictograms:

Description: Mixture of substances listed below with non-hazardous additions
Note: 6.2% of the mixture consists of component(s) of unknown toxicity.

Dangerous Components:		
CAS 77-92-9	 Citric Acid, Skin irritant 2, H315, Eye Irritant 2A, H319	2 – 12%

Note: All ingredients are listed on the Domestic Substances List (DSL) and the Toxic Substances Control Act (TSCA) list.
The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions for trade secrets.

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.

Disclaimer: NOTICE TO READER: Sterling Marking Products Inc. disclaims all express or implied warranties of merchantability and fitness for a particular purpose, with respect to the product or the information provided herein, and shall under no circumstances be liable for incidental or consequential damages.

Do not use ingredient information and/or ingredient percentages in this SDS as a product specification. For product specification information refer to a Product Specification Sheet and/or a Certificate of Analysis. These can be obtained from your local Sterling Marking Products Inc. Sales Office.

All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be correct, Sterling Marking Products Inc. makes no representations as to its accuracy or sufficiency. Conditions of use are beyond Sterling Marking Products' control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process.

End of SDS.