

Lectroetch Electrolyte LNC9

**SECTION 1: IDENTIFICATION**

Product Identifier: Lectroetch Electrolyte LNC9  
 Other Means of Identification: N/A  
 Recommended Use: Electrolytic Etching Solution for Aluminum, Deep-Etch Aluminum, Ferrous Metals, Nickel, Nickel Platings, High-Alloy Steel, Tool Steel and their 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.*

**Classification**  
 Non-Regulated Material

**Label Elements:** None required

**Signal Word:** None required

**Hazard Statements:**  
 Non-regulated material

**Precautionary Statements:**  
 None required

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

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

<b>Dangerous Components:</b>		
CAS 77-92-9	 Citric Acid Skin irritant 2, H315, Eye Irritant 2A, H319	≤2.5%
Proprietary Trade Secret	 Acute Toxicity 4, H302; Skin irritant 2, H315, Eye Irritant 2A, H319	2 - 12%
RTECS: OM 4500000	 STOT SE 3, H335	2 – 12%
Proprietary 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.

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 laundry 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, Hydrogen Chloride gas, Nitrogen Oxides (NOx), Sulphur oxides 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:**

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, metals, powdered metals, Ammonia, Cyanides, Amines and activated Carbon. Store in accordance with good industrial practice. Keep away from heat and direct sunlight.

**SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION****Occupational Exposure Limits****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

**Odor:** Slight.

**pH at 20°C (68°F):** 2.2

**Boiling Point:**  $\geq 100^{\circ}\text{C}/212^{\circ}\text{F}$ .

**Flash Point:** None

**Flammability (solid, gaseous):** Not applicable

**Freezing/Melting Point:** Not determined

**Vapour Pressure:**  $\leq 23$  hPa ( $\leq 17.3$  mm Hg)

**Vapour Density:**  $1.1702$  g/cm<sup>3</sup> (9.7653 lbs/gallon)

**% 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. Carbon monoxide. Carbon dioxide, Cobalt, Cobaltoxides, Hydrogen Chloride gas, Nitrogen Oxides (NOx), Potassium oxides, Sulphur oxides and Sodium 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:** Irritant to skin and mucous membranes.

**Inhalation:** Brief exposure (minutes) is not likely to cause adverse effects.

**Eye Contact:** Is a serious eye irritant.

**Additional Information:**

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

<b>Dangerous Components:</b>		
Proprietary Trade Secret	LD <sub>50</sub> Oral LD <sub>50</sub> /4 Hr Inhalative LC <sub>50</sub> /96 Hr Inhalative	>2,000 mg/kg (Rat) >2,000 mg/l (Rabbit) 2,820 mg/l (Pimephales)
Citric Acid, CAS 77-92-9	LD <sub>50</sub> Oral LD <sub>50</sub> Oral LD <sub>50</sub> Dermal LD <sub>50</sub> Dermal /48 Hr Dermal	5,040 mg/kg (Mouse) 5,400 mg/kg (Rat) >2,000 mg/kg (Rat) 440 mg/l (Daphnia)
Proprietary Trade Secret	LD <sub>50</sub> Oral	1,600 mg/kg (Rat)

**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:**

**SECTION 12: ECOLOGICAL INFORMATION**

**Ecotoxicological Information:**

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

<b>Dangerous Components:</b>
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CAS	Description		Toxicity
	Proprietary Trade Secret	EC <sub>50</sub>	2,700 mg/l (Green Algae) 343.56 mg/l (Water Flea)
77-92-9	Citric Acid, CAS	EC <sub>50</sub>	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.):** Oxidizing Liquid n.o.s.

**DOT Shipping Name:** Lectroetch Electrolyte 125A

**DOT Hazardous Class:**

**DOT UN Number:** Non-Regulated Material

**DOT Packing Group:** II

**DOT Reportable Quantity (lbs):** Not available.

**Note:** No additional remarks.

**Marine Pollutant:**

**TDG (Canada):**

**TDG Shipping Name:** Lectroetch Electrolyte LNC-125A

**Hazard Class:**

**UN Number:** Non-Regulated Material

**Packing Group:** II

**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 Classification**  
Nonregulated Material

**Label Elements:**  
None required

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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.*