SECTION 1. IDENTIFICATION

Product Identifier: (4N) 99.99% Lithium Oxalate

Product Code: LI-OXL-04

CAS Number: 553-91-3

Relevant identified uses of the substance: Scientific research and development

Supplier details:

American Elements
10884 Weyburn Ave.
Los Angeles, CA 90024
Tel: +1 310-208-0551
Fax: +1 310-208-0351
Emergency telephone number:
+1 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

Classification
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label Elements
Signal Word: Warning

Hazard Statements:
Harmful if swallowed
Harmful in contact with skin

Precautionary Statements
Prevention:
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection

Skin:
IF ON SKIN: Wash with plenty of soap and water
Call a POISON CENTER or doctor/physician if you feel unwell
Wash contaminated clothing before reuse

Ingestion:
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Disposal:
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
None identified

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component: Ethanedioic acid, dilithium salt

CAS-No: 553-91-3

Weight: <100%

SECTION 4. FIRST AID MEASURES

General Advice:
If symptoms persist, call a physician.

Eye Contact:
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Skin Contact:
Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

Inhalation:
Move to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

Ingestion:
Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

Most important symptoms and effects:
None reasonably foreseeable.

Notes to Physician:
Treat symptomatically

SECTION 5. FIREFIGHTING MEASURES

Suitable Extinguishing Media:
Carbon dioxide (CO$_2$). Dry powder. Water spray. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Unsuitable Extinguishing Media: No information available
Flash Point: No information available
Method - No information available

Autoignition Temperature: No information available
Explosion Limits
Upper: No data available
Lower: No data available
Sensitivity to Mechanical Impact: No information available
Sensitivity to Static Discharge: No information available

Specific Hazards Arising from the Chemical:
Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products:
Carbon monoxide (CO) Carbon dioxide (CO$_2$) Lithium oxide

Protective Equipment and Precautions for Firefighters:
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA
Health 2
Flammability 1
Instability

Physical hazards -

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:
Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation.

Environmental Precautions:
Should not be released into the environment. See Section 12 for additional ecological information. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.

Methods for Containment and Clean Up:
Sweep up or vacuum up spillage and collect in suitable container for disposal. Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Handling:
Wear personal protective equipment. Ensure adequate ventilation. Do not get in eyes, on skin, or on
CHAPTER 7. PRECAUTIONS FOR SAFE HANDLING

Clothing: Avoid ingestion and inhalation. Avoid dust formation.

Storage:
Keep containers tightly closed in a dry, cool and well-ventilated place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines
This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures:
Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment
Eye/face Protection:
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA’s eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection:
Long sleeved clothing.

Respiratory Protection:
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures:
Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid Crystalline
Appearance: No information available
Odor: No information available
Odor Threshold: No information available
pH: No information available
Melting Point/Range: No data available
Boiling Point/Range: No information available
Flash Point: No information available
Evaporation Rate: Not applicable
Flammability (solid,gas): No information available
Flammability or explosive limits
Upper: No data available
Lower: No data available
Vapor Pressure: No information available
Vapor Density: Not applicable
Specific Gravity: 2.12 g/cm³
Solubility: No information available
Partition coefficient; n-octanol/water: No data available
Autoignition Temperature: No information available
Decomposition Temperature: No information available
Viscosity: Not applicable
Molecular Formula: Li₂ C₂ O₄
Molecular Weight: 101.96

SECTION 10. STABILITY AND REACTIVITY

Reactive Hazard:
None known, based on information available

Stability:
Stable under normal conditions.

Conditions to Avoid:
Incompatible products.

Incompatible Materials:
Oxidizing agents

Hazardous Decomposition Products:
Carbon monoxide (CO), Carbon dioxide (CO₂), Lithium oxide

Hazardous Polymerization:
Hazardous polymerization does not occur.

Hazardous Reactions:
None under normal processing.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity
Product Information:
Component Information:
Toxicologically Synergistic Products: No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation:
No information available

Sensitization:
No information available

Carcinogenicity:
Component: Ethanedioic acid, dilithium salt
CAS-No: 553-91-3
IARC: Not listed
NTP: Not listed
ACGIH: Not listed
OSHA: Not listed
Mexico: Not listed

Mutagenic Effects: No information available
Reproductive Effects: No information available.

Developmental Effects: No information available.

Teratogenicity: No information available.

STOT - single exposure None known
STOT - repeated exposure None known

Aspiration hazard: No information available

Symptoms / effects, both acute and delayed: No information available

Endocrine Disruptor Information: No information available

Other Adverse Effects: The toxicological properties have not been fully investigated

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity
May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system.

Persistence and Degradability:
Insoluble in water May persist

Bioaccumulation/ Accumulation:
No information available.

Mobility:
Is not likely mobile in the environment due its low water solubility

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods:
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14. TRANSPORT INFORMATION

DOT
UN-No UN3288
Proper Shipping Name TOXIC SOLID, INORGANIC, N.O.S. Proper technical name (Lithium oxalate)
Hazard Class 6.1
Packing Group III

TDG
UN-No UN3288
Proper Shipping Name TOXIC SOLID, INORGANIC, N.O.S. Hazard Class 6.1
SECTION 15. REGULATORY INFORMATION

Component: Ethanedioic acid, dilithium salt
TSCA: X
DSL: -
NDSEL: X
EINECS: 209-054-1
ELINCS: -
NLP: -
PICCS: X
ENCS: X
AICS: -
IECSC: X
KECL: X

U.S. Federal Regulations
TSCA 12(b): Not applicable
SARA 313: Not applicable
SARA 311/312 Hazard Categories: See section 2 for more information
CWA (Clean Water Act): Not applicable
Clean Air Act: Not applicable
OSHA Occupational Safety and Health Administration: Not applicable
CERCLA: Not applicable
California Proposition 65: This product does not contain any Proposition 65 chemicals
U.S. State Right-to-Know Regulations: Not applicable

U.S. Department of Transportation:
Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security:
This product does not contain any DHS chemicals.

Other International Regulations
Mexico - Grade No information available

16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is