Material Safety Data Sheet

Lithium tetrafluoroborate, anhydrous, 98%

ACC# 78596

Section 1 - Chemical Product and Company Identification

MSDS Name: Lithium tetrafluoroborate, anhydrous, 98% Catalog Numbers: AC223770000, AC223770100, AC223770500

Synonyms:

Company Identification: Acros Organics N.V. One Reagent Lane

Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01

For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

| CAS# | Chemical Name | Percent | EINECS/ELINCS |
|------------|---|---------|---------------|
| 14283-07-9 | Lithium tetrafluoroborate, anhydrous, 98% | 98% | 238-178-9 |

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: not available solid.

Danger! Corrosive. Causes eye and skin burns. Causes digestive and respiratory tract burns. May cause blood abnormalities. May cause liver and kidney damage. May cause cardiac disturbances. Hygroscopic (absorbs moisture from the air).

Target Organs: Blood, kidneys, central nervous system, liver.

Potential Health Effects

Eye: Contact with eyes may cause severe irritation, and possible eye burns.

Skin: May cause severe irritation and possible burns

Ingestion: Harmful if swallowed. Causes gastrointestinal tract burns.

Inhalation: May cause irritation of the respiratory tract with burning pain in the nose and throat, coughing, wheezing, shortness of

breath and pulmonary edema. May cause abdominal pain, nausea, vomiting, and inflammation of the gums and mouth.

Chronic: Overexposure may cause delayed kidney injury. Chronic ingestion may cause liver damage. May cause anemia and other blood cell abnormalities. May cause digestive tract and cardiac disturbances.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid imme diately.

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately. **Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

Flash Point: Not available.

Autoignition Temperature: Not available. **Explosion Limits, Lower:**Not available.

Upper: Not available. **NFPA Rating:** Not published.

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8. **Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container.

Section 7 - Handling and Storage

Handling: Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use and store under nitrogen. Use only in

a chemical fume hood.

Storage: Store in a cool, dry place. Store in a tightly closed container. Corrosives area.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. **Exposure Limits**

| Chemical Name | ACGIH | NIOSH | OSHA - Final PELs |
|--|-------------|-------------|-------------------|
| Lithium tetrafluoroborate, anhydrous, 98% | none listed | none listed | none listed |

OSHA Vacated PELs: Lithium tetrafluoroborate, anhydrous, 98%: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear chemical splash goggles and face shield.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear a chemical apron.

Respirators: A NIOSH/MSHA approved air purifying dust or mist respirator or European Standard EN 149.

Section 9 - Physical and Chemical Properties

Physical State: Solid Appearance: not available Odor: Not available. pH: Not available.

Vapor Pressure: Not available. Vapor Density: Not available. Evaporation Rate: Not available. Viscosity: Not available. Boiling Point: Not available.

Freezing/Melting Point:275 deg C dec Decomposition Temperature:Not available.

Solubility: soluble

Specific Gravity/Density:.8520g/cm3

Molecular Formula: BF4Li Molecular Weight: 93.75

Section 10 - Stability and Reactivity

Chemical Stability: Stable.

Conditions to Avoid: Exposure to moist air or water. Incompatibilities with Other Materials: Strong acids

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, hydrogen fluoride gas.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:

CAS# 14283-07-9 unlisted.

LD50/LC50: Not available.

Carcinogenicity:

CAS# 14283-07-9: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information available.
Teratogenicity: No information available.
Reproductive Effects: No information available.
Mutagenicity: No information available.
Neurotoxicity: No information available.

Other Studies:

Section 12 - Ecological Information

No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the

classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed. RCRA U-Series: None listed.

Section 14 - Transport Information

| | US DOT | Canada TDG | |
|----------------|--|--|--|
| Shipping Name: | TOXIC SOLIDS, CORROSIVE, ORGANIC, N.O.S. | TOXIC SOLID CORROSIVE INORGANIC (LITHIUM TETRAFLUROBORATE) | |
| Hazard Class: | 6.1 | 6.1 | |
| UN Number: | UN2928 | UN3290 | |
| Packing Group: | II | II | |

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 14283-07-9 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

Section 313 No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 14283-07-9 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

С

Risk Phrases:

R 20/21/22 Harmful by inhalation, in contact with skin and if

swallowed.

R 34 Causes burns.

Safety Phrases:

S 25 Avoid contact with eyes.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 14283-07-9: No information available.

Canada - DSL/NDSL

CAS# 14283-07-9 is listed on Canada's NDSL List.

Canada - WHMIS

This product has a WHMIS classification of D1A, D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

Section 16 - Additional Information

MSDS Creation Date: 9/02/1997 **Revision #3 Date:** 10/03/2005

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.