



# SAFETY DATA SHEET

ProChemOnline.com



## SECTION 1 PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: **Lithium niobate**  
PRODUCT NO: 2348  
CAS NO: 12031-63-9  
SYNONYMS: Lithium niobium oxide

### MANUFACTURER:

Prochem, Inc.  
826 Roosevelt Road  
Rockford, IL 61109

PHONE: 815-398-1788  
FAX: 815-398-1810  
TOLL FREE: 800-795-8788

IN CASE OF TRANSPORTATION EMERGENCY CONTACT CHEM-TREC: 1-800-424-9300

## SECTION 2 HAZARDS IDENTIFICATION

### CLASSIFICATION OF SUBSTANCE OR MIXTURE

Not a dangerous substance according to the GHS

### HMIS CLASSIFICATION:

Health: 0 Flammability: 0 Reactivity: 0

### NFPA RATING:

Health: 0 Fire: 0 Reactivity Hazard: 0

**EYE CONTACT:** Causes irritation of the eyes.

**SKIN CONTACT:** May cause mild irritation and redness.

**INHALATION:** May cause irritation to the respiratory tract.

**INGESTION:** May be harmful if swallowed.

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Formula:  $\text{LiNbO}_3$

Molecular Weight: 147.84

| CHEMICAL NAME   | CAS#       | %   | ACGIH (TWA)    | OSHA (PEL) |
|-----------------|------------|-----|----------------|------------|
| Lithium niobate | 12031-63-9 | 100 | Not determined | No data    |

## SECTION 4 FIRST AID MEASURES

**EYE EXPOSURE:** Immediately flush the eyes with copious amounts of water (lukewarm if possible) for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.

## SECTION 4 FIRST AID MEASURES (Cont.)

**SKIN EXPOSURE:** Wash affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation, burns, or redness persists.

**INHALATION:** Remove the victim to fresh air. Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, or pain. In such cases, seek immediate medical assistance. Give oxygen if deemed necessary. If not breathing administer CPR. Get emergency care immediately.

**INGESTION:** Never give anything by mouth to an unconscious person. Rinse mouth with water.

## SECTION 5 FIREFIGHTING MEASURES

**FLASH POINT:** Product is not flammable.

**AUTO IGNITION TEMPERATURE:** No data

**EXPLOSION LIMITS:** No data

**EXTINGUISHING MEDIUM:** Use fire fighting measures that suit the surrounding fire.

**SPECIAL FIRE FIGHTING PROCEDURES:** Wear self-contained breathing apparatus for fire fighting if necessary.

**HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:** Lithium oxide and niobium oxides

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** Wear personal protective equipment. Avoid dust formation.

**ENVIRONMENTAL PRECAUTIONS:** Do not let product enter drains or be released to the environment.

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:** Sweep up avoiding raising dust and place in a well-marked container for disposal.

## SECTION 7 HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING:** Provide appropriate exhaust ventilation at places where dust is formed.

**CONDITIONS FOR SAFE STORAGE:** Store in a tightly sealed container. Store at room temperature. Avoid contact with direct sunlight and moisture.

## SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

**EYE PROTECTION:** Always wear approved safety glasses with side shields, safety goggles, or face shield when handling a chemical substance in the laboratory.

**SKIN PROTECTION:** Chemical resistant gloves.

**VENTILATION:** If possible, handle the material in a local exhaust hood.

**RESPIRATOR:** If in form of fine dust and ventilation is not available a respirator should be worn. The use of respirators requires a Respirator Protection Program to be in compliance with 29 CFR 19-10.134.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**COLOR AND FORM:** White powder

**MELTING POINT:** 1275° C

**BOILING POINT:** No data

**MOLECULAR WEIGHT:** 147.84

**ODOR:** None

**SPECIFIC GRAVITY:** 4.65 gm/ml

**% VOLATILE BY VOLUME:** Non volatile

**VAPOR PRESSURE:** Not applicable

**SOLUBILITY IN WATER:** No data available

## SECTION 10 STABILITY AND REACTIVITY

**STABILITY:** Stable

## SECTION 10 STABILITY AND REACTIVITY (Cont.)

**HAZARDOUS POLYMERIZATION:** Will not occur  
**CONDITIONS TO AVOID:** Contact with moisture  
**INCOMPATIBILITY:** Strong oxidizing agents  
**DECOMPOSITION PRODUCTS:** Lithium oxides and niobium oxides

## SECTION 11 TOXICOLOGICAL DATA

**ACUTE TOXICITY:** Oral-LD50-8000 mg/kg (rat)  
**CARCINOGENIC EFFECTS:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen.  
**MUTAGENIC EFFECTS:** No data  
**TETRAOGENIC EFFECTS:** No data  
**RTECS DATA:** QT9800000

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

## SECTION 12 ECOLOGICAL DATA

No information available

## SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of in according to local, state, and federal regulations.

## SECTION 14 TRANSPORTATION DATA

Non-hazardous material

## SECTION 15 REGULATORY INFORMATION

**TSCA:** Listed in the TSCA Inventory  
**SARA 302 COMPONENTS:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.  
**SARA (TITLE 313):** This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.  
**MASSACHUSETTS RIGHT TO KNOW COMPONENTS:** No components are subject to the Massachusetts Right to Know Act.  
**PENNSYLVANIA RIGHT TO KNOW COMPONENTS:** Lithium niobium trioxide  
**NEW JERSEY RIGHT TO KNOW COMPONENTS:** Lithium niobium trioxide  
**CALIFORNIA PROP. 65 COMPONENTS:** This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## SECTION 16 OTHER INFORMATION

**DISCLAIMER:** The information herein is believed to be accurate and reliable as of the date compiled. However, Prochem, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.  
**DATE PREPARED:** 04/14  
**SDS DEPT.**