

SAFETY DATA SHEET

Date Revised: 05/15/2017

SECTION 1. IDENTIFICATION

Product Name: Niobium Oxalate

CAS #: 21348-59-4

Relevant identified uses of the substance: Scientific research and development

Supplier details:

Stanford Advanced Materials

23661 Birtcher Dr.

Lake Forest, CA 92630

Tel: +1 (949) 407-8904

Fax: +1 (949) 812-6690

Emergency telephone number:

Domestic, North America: +1 (949) 407-8904

SECTION 2. HAZARDS IDENTIFICATION

Statements of Hazard: Irritant

Acute Health Hazard: Irritant to eyes, skin, mucous membranes and respiratory system. May be harmful by ingestion, inhalation or skin absorption.

Chronic Health Hazard: Not Available

HMIS Rating: H:1 F:0 P:0

NFPA Rating: H:1 F:0 R:0

To the best of our knowledge, the toxicological properties of this chemical have not been thoroughly investigated. Use appropriate procedures and precautions to prevent or minimize exposure.

Pictogram

Signal Word: Warning

Hazard Statement(s):

H302 Harmful if swallowed.

H312 Harmful in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.

Precautionary Statement(s):

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P332+P313 If skin irritation occurs: Get medical advice/ attention.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name: Niobium(V) oxalate
CAS Number: 21348-59-4
EINECS Number: 244-341-5
Molecular Formula: C₁₀H₅NbO₂₀
Molecular Weight: 538.04
Content: 95-100%

SECTION 4. FIRST AID MEASURES

Eye Contact: Flush eyes with large amounts of water for fifteen minutes. Separate eyelids with fingers. If irritation persists, seek medical attention.
Skin Contact: Wash skin with soap and water. If irritation persists, seek medical attention.
Ingestion: Do not induce vomiting. Seek medical attention.
Inhalation: Move to a fresh air environment. Contact a physician if breathing becomes difficult.

SECTION 5. FIREFIGHTING MEASURES

Flash Point: 188 °C
Explosion Limits:
Lower: Not Available
Upper: Not Available
Autoignition: Not Available
Extinguishing Media: Carbon dioxide, dry chemical powder, alcohol-resistant foam or water spray.
Protective Equipment: Wear self-contained respirator and fully protective impervious suit.
Specific Hazards: May emit hazardous fumes under fire conditions.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Protection: Wear a self-contained breathing apparatus, rubber boots and gloves, and disposable coveralls. Dispose of coveralls after use. Keep unprotected persons away.

Environmental Protection: Keep spills out of sewers and bodies of water. Dike and contain the spill with inert material. Absorb on sand, vermiculite or diatomite. Transfer material to a container for disposal or recovery. Ventilate area and wash spill site after material pickup is complete.

SECTION 7. HANDLING AND STORAGE

Handling: Avoid breathing dust, vapor, mist or gas.

Avoid contact with skin and eyes. Avoid prolonged or repeated exposure. Use only in a chemical fume hood. Open and handle container with care. Keep ignition sources away.

Storage: Store in a tightly closed container in a dry, well-ventilated place.

Sensitivities: Not Available

Storage Temperature: 15-30 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eyes: Wear appropriate protective eyeglass or chemical safety goggles. Make sure that there is an eyewash facility in your vicinity.

Skin: Wear impervious gloves and protective clothing.

Respiratory: Use a NIOSH approved respirator when exposure limits are exceeded or if irritation or other symptoms are experienced.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Powder

Odor: Not Available

Melting Point: Not Available

Boiling Point: Not Available

pH Value: Not Available

Density: Not Available

Refractive Index, n_{20D}: Not Available

Viscosity: Not Available

Solubility in Water: Not Available

Vapor Pressure: Not Available

Vapor Density(Air=1): Not Available

SECTION 10. STABILITY AND REACTIVITY

Stability: Stable under normal temperatures and pressures.

Incompatibility: Strong oxidizing agents.

Conditions to Avoid: Heat, Flame, Sparks, Other ignition sources

Hazardous Decomposition Products: Carbon oxides, Niobium oxides

SECTION 11. TOXICOLOGICAL INFORMATION

RTECS Reference: Not Available

Target Organs: Not Available

Toxicity Data: Not Available
Skin corrosion/irritation: Not Available
Serious eye damage/irritation: Not Available
Carcinogenicity: Not Available

SECTION 12. ECOLOGICAL INFORMATION

Toxicity: Not Available
Persistence and degradability: Not Available
Bioaccumulative potential: Not Available
Mobility in soil: Not Available
PBT and vPvB assessment: Not Available
Other adverse effects: Not Available

SECTION 13. DISPOSAL CONSIDERATIONS

Contact a licensed professional waste disposal service. Dispose in a manner consistent with federal, state and local environmental regulations.

SECTION 14. EXPOSURE CONTROLS/PERSONAL PROTECTION

DOT: Not Regulated
IATA: Not Regulated
IMDG: Not Regulated

SECTION 15. REGULATORY INFORMATION

United States:
Toxic Substance Control Act (TSCA): Listed
Superfund Amendments and Reauthorization Act (SARA 302): Not listed
Superfund Amendments and Reauthorization Act (SARA 311/312): Not listed
Superfund Amendments and Reauthorization Act (SARA 313): Not listed
European Union:
European Inventory of Existing Chemical Substances (EINECS): No. 244-341-5
Hazard Codes: Xi
Risk Statements: 21/22
Safety Statements: 24/25
Canada
Canadian Domestic Substances List (DSL): Not listed
Canadian Non-Domestic Substances List (NDSL): Listed

SECTION 16. OTHER INFORMATION

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