



# SAFETY DATA SHEET

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## SECTION 1 PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: **Samarium (III) Oxide**

PRODUCT NO: 3097

CAS NO: 12060-58-1

SYNONYMS: Samarium sesquioxide

### MANUFACTURER:

ProChem, Inc.  
826 Roosevelt Road  
Rockford, IL 61109

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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:** May cause eye irritation.

**SKIN CONTACT:** May cause skin irritation.

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

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

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Formula:  $\text{Sm}_2\text{O}_3$

Molecular Weight: 348.72

| CHEMICAL NAME  | CAS#       | %   | ACGIH (TWA) | OSHA (PEL) |
|----------------|------------|-----|-------------|------------|
| Samarium oxide | 12060-58-1 | 100 | No data     | No data    |

## SECTION 4 FIRST AID MEASURES

**EYE EXPOSURE:** Rinse opened eye for several minutes under running water. Consult a physician.

**SKIN EXPOSURE:** Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice.

**INHALATION:** Supply fresh air. If required, provide artificial respiration. Keep patient warm. Immediately seek medical advice.

**INGESTION:** Do NOT induce vomiting. Loosen tight clothing such as a collar, tie, belt, or waistband. If victim is not breathing, perform mouth-to-mouth resuscitation. Immediately seek medical attention.

## SECTION 5 FIREFIGHTING MEASURES

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

**AUTO IGNITION TEMPERATURE:** Not applicable

**EXPLOSION LIMITS:** Not applicable

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

**SPECIAL FIRE FIGHTING PROCEDURES:** If involved in a fire, fire fighters should be equipped with a NIOSH approved positive pressure self-contained breathing apparatus and full protective clothing.

**HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:** None

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** Wear approved personal protective equipment. Avoid breathing dust, vapors, mist, or gas. Ensure adequate ventilation.

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

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:** Use shovel to put material in the proper container for disposal. Finish cleaning by spreading water on the contaminated surface.

## SECTION 7 HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING:** Wear personal protective equipment. Keep container tightly sealed. Do not breathe dust. Ensure adequate ventilation.

**CONDITIONS FOR SAFE STORAGE:** Keep container tightly closed and store in a cool, dry, and well-ventilated area.

## 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 chemicals substance in the laboratory.

**SKIN PROTECTION:** Chemical resistant gloves.

**VENTILATION:** If possible, handle the material in an efficient fume 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:** Yellow to beige powder

**MELTING POINT:** 2335°C

**BOILING POINT:** No data available

**MOLECULAR WEIGHT:** 348.72

**ODOR:** No data available

**SPECIFIC GRAVITY:** 8.347

**VAPOR PRESSURE:** Not applicable

**SOLUBILITY IN WATER:** Insoluble

## SECTION 10 STABILITY AND REACTIVITY

**STABILITY:** Stable

**HAZARDOUS POLYMERIZATION:** No hazardous polymerization

**CONDITIONS TO AVOID:** None

**INCOMPATIBILITY:** Strong oxidizing agents and carbon dioxide

**DECOMPOSITION PRODUCTS:** None

## SECTION 11 TOXICOLOGICAL DATA

**ACUTE TOXICITY:** Acute oral toxicity (LD50): 5000 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

**TETRATOGENIC EFFECTS:** No data

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.

**SARA 311/312 HAZARDS:** No SARA Hazards

**MASSACHUSETTS RIGHT TO KNOW COMPONENTS:** No components are subject to the Massachusetts Right to Know Act.

**PENNSYLVANIA RIGHT TO KNOW COMPONENTS:** Samarium (III) oxide

**NEW JERSEY RIGHT TO KNOW COMPONENTS:** Samarium (III) oxide

**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 REVISED:** 08/25  
**SDS DEPT.**