



# SAFETY DATA SHEET

ProChemOnline.com



## SECTION 1 PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: **Samarium, powder**

PRODUCT NUMBER: 3070

CAS NUMBER: 7400-19-9

### MANUFACTURER:

Prochem, Inc.  
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## SECTION 2 HAZARDS IDENTIFICATION

### CLASSIFICATION OF SUBSTANCE OR MIXTURE

Pictogram



Signal Word

**Danger**

### Hazard Statements

H228	Flammable solid
H260	In contact with water releases flammable gases which may ignite spontaneously
H373	May cause damage to organs through prolonged or repeated exposure

### Precautionary Phrases

P210	Keep away from heat/sparks/open flames/hot surfaces
P223	Keep away from any possible contact with water, because of violent reaction and possible flash fire.
P231+P232	Handle under inert gas. Protect from moisture.
P240	Ground/bond container and receiving equipment
P241	Use explosion-proof electrical/ventilating/lighting equipment
P260	Do not breathe dust or mist.
P280	Wear protective gloves/protective clothing/eye protection/face protection
P314	Get medical advice/attention if you feel unwell
P335+P334	Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages
P370+P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction

### HMIS CLASSIFICATION:

Health: 1      Fire: 3      Reactivity Hazard: 2

### NFPA RATING:

Health: 0      Flammability: 2      Reactivity Hazard: 2      Specific Hazard: W

## SECTION 2 HAZARDS IDENTIFICATION (Cont.)

**EYE CONTACT:** May cause slight to mild irritation of the eyes.

**SKIN CONTACT:** May cause slight to mild irritation of the skin.

**INHALATION:** Inhalation of fine dust may be irritating to the nasal cavity, mucous membranes, and respiratory tract.

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

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Formula: Sm

Molecular Weight: 150.40

CHEMICAL NAME	CAS#	%
Samarium	7440-19-9	100

## SECTION 4 FIRST AID MEASURES

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

**SKIN EXPOSURE:** Was affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

**INHALATION:** Remove to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention if necessary.

**INGESTION:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention if necessary.

## SECTION 5 FIREFIGHTING MEASURES

**FLASH POINT:** Not available

**AUTO IGNITION TEMPERATURE:** Not available

**EXPLOSION LIMITS:** Not available

**EXTINGUISHING MEDIUM:** Carbon dioxide or dry powder.

**SPECIAL FIRE FIGHTING PROCEDURES:** Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

**HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:** Samarium Oxide

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** Wear all appropriate equipment when using this material. Ensure adequate ventilation.

**ENVIRONMENTAL PRECAUTIONS:** Prevent spillage from entering drains or allowing to be released to the environment.

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:** Fine powder should be covered with sodium carbonate or dolomite in order to reduce the formation of dust. Sweep up and place in suitable container for disposal.

## SECTION 7 HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING:** Wear appropriate personal protective equipment. Avoid contact with skin and eyes. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of dusts and aerosols. Keep away from sources of ignition – No smoking. Take measures to prevent the build up of electrostatic charge. Handle in argon.

**CONDITIONS FOR SAFE STORAGE:** Store in cool, dry, and well-ventilated area under argon. Keep away from incompatible materials. Air and moisture sensitive. Store under dry inert gas. Store away from oxidizing agents, halogens, and acid chlorides.

## SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

**EXPOSURE CONTROLS:** Contains no substances with occupational exposure limit values.

**EYE PROTECTION:** Wear chemical safety glasses or goggles and face shield.

**SKIN PROTECTION:** Wear nitrile or rubber gloves, and a complete suit protecting against chemicals.

**VENTILATION:** Provide local exhaust, preferably mechanical.

**RESPIRATOR:** Use an approved respirator.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**COLOR AND FORM:** Gray to silver powder

**ODOR:** None

**MOLECULAR WEIGHT:** 150.40

**BOILING POINT:** 1794° C

**MELTING POINT:** 1072° C

**SPECIFIC GRAVITY:** 7.4 gm/ml

**VAPOR DENSITY:** No data available

**SOLUBILITY:** Reacts with water

## SECTION 10 STABILITY AND REACTIVITY

**STABILITY:** Stable

**HAZARDOUS POLYMERIZATION:** Reacts violently with water.

**CONDITIONS TO AVOID:** Heat, flames, and sparks. Extremes of temperature and direct sunlight. Exposure to moisture.

**INCOMPATIBILITY:** Halogens, strong acids, strong oxidizing agents, water, oxygen, and halocarbons.

**DECOMPOSITION PRODUCTS:** Samarium oxides

## SECTION 11 TOXICOLOGICAL DATA

**ACUTE TOXICITY:** Not available

**CARCINOGENIC EFFECTS:** No components of this product present at levels greater than or equal to 0.1% is identified a carcinogen.

**MUTAGENIC EFFECTS:** Not available

**TETRAOGENIC EFFECTS:** Not available

**CHRONIC TOXICITY:** Rare earth compounds may cause delayed blood clotting leading to hemorrhages. Inhalations of rare earths may cause sensitivity to heat, itching, and increased awareness of odor and taste. Abdominal pain, nausea, vomiting, salivation, fatigue, dizziness, confusion. Palpitation, ataxia.

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

## SECTION 12 ECOLOGICAL DATA

No data available.

## SECTION 13 DISPOSAL CONSIDERATIONS

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

## SECTION 14 TRANSPORTATION DATA

**DOT:** UN3089

Metal powders, flammable, n.o.s.  
(Samarium powder)

Class 4.1

PG III

**IATA:** UN3089

Metal powder, flammable, n.o.s.  
(Samarium powder)

Class 4.1

PG III

## SECTION 15 REGULATORY INFORMATION

**TSCA:** Listed in the TSCA inventory

**DSCL (EEC):** Listed on the DSCL inventory

**SARA 302/304:** Not Listed

**SARA 311/312:** Fire Hazard, Chronic Health Hazard

**SARA (TITLE 313):** Not Listed

**CALIFORNIA PROP. 65:** Not Listed

## **SECTION 15 REGULATORY INFORMATION (Cont.)**

**WHMIS CANADA:** Not Listed

**NEW JERSEY RIGHT TO KNOW COMPONENTS:** Samarium

**PENNSYLVANIA RIGHT TO KNOW COMPONENTS:** Samarium

## **SECTION 16 OTHER INFORMATION**

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