



# SAFETY DATA SHEET

ProChemOnline.com



## SECTION 1 PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: **Yttrium, powder**

PRODUCT NUMBER: 3826

CAS NUMBER: 7440-65-5

### 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

Pictogram



Signal Word

**Danger**

### Hazard Statements

H228	Flammable solid.
H250	Catches fire spontaneously if exposed to air.
H302+H312+H332	Harmful if swallowed, in contact with skin, or if inhaled.

### Precautionary Phrases

P210	Keep away from heat/sparks/open flames/hot surfaces.
P222	Do not allow contact with air.
P231	Handle under inert gas.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P270	Do not eat, drink, or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/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.
P335+P334	Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages
P363	Wash contaminated clothing before reuse
P370+P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction

## SECTION 2 HAZARDS IDENTIFICATION (Cont.)

### HMIS CLASSIFICATION:

Health: 2 Fire: 3 Reactivity Hazard: 3

### NFPA RATING:

Health: 2 Flammability: 3 Reactivity Hazard: 3

**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: Y

Molecular Weight: 88.90

CHEMICAL NAME	CAS#	%
Yttrium powder	7440-65-5	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 the eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.

**SKIN EXPOSURE:** Wash 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:** Seek medical assistance immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting if directed by medical personnel.

## SECTION 5 FIREFIGHTING MEASURES

**FLASH POINT:** Not available

**AUTO IGNITION TEMPERATURE:** Not available

**EXPLOSION LIMITS:** Not available

**EXTINGUISHING MEDIUM:** Special powder for metal fires. Do not use water.

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

**HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:** Yttrium oxides

**UNUSUAL FIRE OR EXPLOSION HAZARDS:** Flammable solid. Burns with intense heat. Dust may form explosive mixtures with air. Evolves hydrogen with hot water.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** Wear all appropriate equipment when using this material. Ensure adequate ventilation. Keep unprotected persons away. Keep away from sources of ignition.

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

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:** Small spills can be covered in sodium carbonate to reduce formation of dust. Sweep up mixture.

## SECTION 7 HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING:** Wear appropriate personal protective equipment. Use with adequate ventilation. Avoid contact with skin and eyes. Avoid formation of dust. Keep away from sources of ignition-No smoking.

**CONDITIONS FOR SAFE STORAGE:** Store in cool, dry, and well-ventilated area. Store in a tightly sealed container under an inert atmosphere of argon. Store away from air, moisture, and water. Moisture and air sensitive. Protect from humidity and water.

## SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

### EXPOSURE CONTROLS

Component	Exposure Limits	Basis	Entity
Yttrium	1 mg/m <sup>3</sup>	TLV	ACGIH
	1 mg/m <sup>3</sup>	PEL	OSHA
	1 mg/m <sup>3</sup>	REL	NIOSH

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

**EYE PROTECTION:** Wear chemical safety glasses or goggles.

**SKIN PROTECTION:** Wear nitrile or rubber gloves, and ensure that your protective clothing is fire retardant.

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

**RESPIRATOR:** Use an approved respirator.

**ADDITIONAL PROTECTION:** Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**COLOR AND FORM:** Gray powder

**ODOR:** None

**MOLECULAR WEIGHT:** 88.90

**BOILING POINT:** 3338°C

**MELTING POINT:** 1522°C

**SPECIFIC GRAVITY:** 4.47 gm/ml

**VAPOR DENSITY:** No data available

**SOLUBILITY:** Insoluble

## SECTION 10 STABILITY AND REACTIVITY

**STABILITY:** Stable

**HAZARDOUS POLYMERIZATION:** Will not occur

**CONDITIONS TO AVOID:** Contact with hot water. Heat, flames, and sparks. Extremes of temperature and direct sunlight.

**INCOMPATIBILITY:** Strong oxidizing agents, water, halogens, halocarbons, and mineral acids.

**DECOMPOSITION PRODUCTS:** Yttrium 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

**TETRATOGENIC EFFECTS:** Not available

**RTECS:** ZG2980000

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.  
(Yttrium)  
CLASS 4.1  
PG II

IATA: UN3089  
Metal powder, flammable, n.o.s.  
(Yttrium)  
CLASS 4.1  
PG II

Marine Pollutant: No

## SECTION 15 REGULATORY INFORMATION

**TSCA:** Listed in the TSCA inventory  
**SARA 302/304:** Not Listed  
**SARA 311/312:** Fire Hazard, Acute Health Hazard  
**SARA (TITLE 313):** Not Listed  
**CALIFORNIA PROP. 65:** Not Listed  
**MASSACHUSETTS RIGHT TO KNOW:** Yttrium  
**PENNSYLVANIA RIGHT TO KNOW:** Yttrium  
**NEW JERSEY RIGHT TO KNOW:** Yttrium  
**WHMIS CANADA:** Class B-4: Flammable solid

## 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:** 09/14