

Material Safety Data Sheet

Identity: Yttrium Metal

Chemical Formula: Y

SECTION I - GENERAL INFORMATION

Manufacturer: [Stanford Advanced Materials](#) (SAM)

The information below is believed to be accurate and represents the best information available to SAM. However, SAM makes no warranty, expressed or implied with respect to such information and we assume no liability resulting from its use.

SECTION II - PRODUCT INFORMATION/HAZARDOUS INGREDIENTS
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Synonyms: Yttrium Metal Arc Cast 99.9%, Yttrium Metal Distilled 99.9%, Yttrium Metal 99.9% Crude, Yttrium Metal 99.9% Purified.

Chemical Names:	CAS #	OSHA Hazardous (H)	%
Yttrium	7440-65-5	H	>99

Chemical names	ACGIH/TLV	OSHA (TWA)
Particulates	10mg /m3 (TWA) Total dust	15 mg/m3 total dust
Not otherwise reg		5 mg/m3 respirable
Yttrium Metal and Compounds	1 mg/m3 (TWA)	1 mg/m3 (TWA)

SARA Title III Hazard Classification: Acute Health Hazard, Chronic Health Hazard, Fire Hazard, Reactive Hazard

SECTION III – PHYSICAL DATA

Boiling Point: 5300°F	Specific Gravity: 4.47
Vapor Density: NA	
Physical States: Solid	Solubility in Water: Insoluble

Evaporation Rate: NA % Volatile: Zero
Appearance and Odor: Silver solid (ingot, chunk, foil, powder)/odorless.

SECTION IV - FIRE AND EXPLOSION DATA

Flashpoint: N/A Autoignition Temp: Non-flammable

Extinguishing Media: Dry chemical, Class D Extinguisher. DO NOT USE WATER!!

Special Fire Fighting Procedures: Firefighters must wear full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution.

Unusual Fire and Explosion Hazards: Avoid creating fine dusts, because as a powder, this product is capable of creating a dust explosion.

SECTION V - HEALTH HAZARD DATA

Effects of Single Exposure

Swallowing: Evidence suggests low toxicity potential due to poor absorption by the oral route

Skin absorption: Evidence suggests low toxicity potential due to poor skin absorption.

Inhalation: May be harmful if inhaled. A comparative study showed that yttrium oxide produced pulmonary changes (diffuse sclerosis) in rats.

Skin Contact: May cause irritation. Eye

Contact: May cause eye irritation.

Other: Has anticoagulant effect when given intravenously.

Effects of Repeated Exposure: No data found.

Carcinogenicity: This product does not contain any ingredient designated by IARC, NTP, ACGIH, or OSHA as a probable human carcinogen.

Medical Conditions Possibly Aggravated by Overexposure: No data found.

First Aid Procedures:

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes using an eyewash fountain. Lift upper and lower lids and rinse well under them. Get medical attention if irritation develops or persists.

Skin: In case of contact, immediately wash with soap and plenty of water for at least 5 minutes. Remove contaminated clothing and shoes. Thoroughly clean contaminated clothing and shoes before reuse. Get medical attention if irritation develops or persists.

Inhalation: Remove from area of exposure. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. GET IMMEDIATE MEDICAL ATTENTION.

Ingestion: If swallowed and victim is fully conscious, induce vomiting immediately by giving two glasses of water and sticking finger down throat. GET IMMEDIATE MEDICAL ATTENTION.

Note to Physician: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Treat symptomatically. No specific information found.

SECTION VI – REACTIVITY DATA

Stability: Stable

Conditions to Avoid: Avoid creating dusts. Air and moisture sensitive.

Incompatibility: Halogens, strong acids, strong oxidizing materials.

Hazardous Polymerization: Will not occur

Hazardous Decomposition Products: The nature of decomposition products is not known.

SECTION VII – PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be taken if material is released or spilled: Eliminate all sources of ignition. Evacuate area. Wear appropriate protective gear. Sweep into appropriate container. Avoid creating dust. DO NOT use “shop” vacuum as this may cause a fire. Ventilate area. Wash spill area after material pickup is complete.

Waste disposal Method: Dispose of in accordance with local, state, and federal regulations.

Handling and Storage: Store in a cool dry place, in tightly closed containers. Air and moisture sensitive. Store away from oxidizers and other materials listed under incompatibility. STORE UNDER ARGON OR OTHER INERT ENVIRONMENT. Avoid breathing dusts. Avoid direct or prolonged contact with skin and eyes. Wash hands thoroughly after handling. Do not rub eyes with soiled hands. Do not eat, drink, or smoke in work area.

Other: Avoid creating dust as this product, like most materials in powder form, is capable of creating a dust explosion.

SECTION VIII – PROTECTIVE EQUIPMENT

Respiratory: NIOSH/MSHA approved dust mask.

Ventilation: Provide adequate ventilation. Use local exhaust as needed to maintain airborne exposure below control limits.

Protective clothing: Work clothing and gloves.

Eye: Safety Glasses with Side Shields, Chemical workers dust-proof goggles, under dusting conditions.

Other Protective Equipment: Maintain a sink, safety shower and eyewash fountain in work area.

Have oxygen readily available.

Please be advised that N/A can either mean Not Applicable or No Data Has Been Established