

# MATERIAL SAFETY DATA SHEET

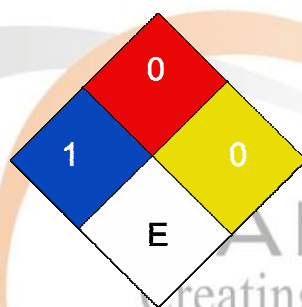
## ZIRCONIUM (IV) OXIDE -YTTRIA STABILIZED

Stock #: NS6130-12-000627

### 1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY

Product Name : Zirconium (IV) Oxide -Yttria Stabilized  
 Use : Research and Development  
 Address : Nanoshel LLC  
 3422 Old Capitol Suit 1305  
 Willmington DE – 19808  
 United States

Emergency : +1.532.253.9878



Health	1
Fire	0
Reactivity	0
Personal Protection	E

### 2. COMPOSITION & INFORMATION ON INGREDIENTS

Chemical Characterisation :  $ZrO_2 \cdot Y_2O_3$   
 Hazardous Ingredients : Nil

### 3. HAZARD IDENTIFICATION

Toxicity : No Data Available  
 Eye Contact : Dust may cause irritation

### 4. FIRST AID MEASURES

Skin : Wash skin with soap and copious amounts of water  
 Eyes : Immediate and prolonged irritation treat with copious amounts of water.

Ingestion : Wash out mouth with water provided person Is Conscious.

Inhalation : If inhaled, remove to fresh air. If not breathing

give artificial respiration. If breathing is difficult, give oxygen

## 5. FIREFIGHTING MEASURES

Extinguishing Data	:	Water Spray
Unsuitable Extinguishing Data	:	Carbon Dioxide, Dry Chemical Powder, Polymer Foam
Unusual Firefighting Hazards	:	Capable of creating a dust explosion
Special Firefighting Procedures	:	Use normal procedures which include wearing self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

## 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	:	Wear respirator, chemical safety goggles, rubber boots and gloves.
Precautions to the Environment	:	Sweep up, place in a bag and hold for waste disposal.
Cleanup Procedures	:	Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

## 7. HANDLING AND STORAGE

Handling Precautions	:	Chemical Safety Goggles. Compatible with Chemical-resistant Gloves
Storage	:	Store in a cool dry place.
Unusable Packaging Materials	:	Wash thoroughly after handling. Irritating dust, Keep tightly closed

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### Exposure Controls

#### Personal Protective Equipment

Respiratory	:	Self-contained breathing apparatus
Hand	:	Chemical-resistant Gloves
Eye	:	Avoid contact with eyes
Skin	:	Wash thoroughly after handling

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance**

Form	:	N/A
Colour	:	N/A
Odour	:	N/A

**Safety Related Information**

FlashPoint	:	N/A
Boiling Point	:	N/A
Melting Point	:	~2700°C
pH	:	N/A

**10. STABILITY AND REACTIVITY**

Stability	:	Completely Stable
Reactivity	:	Non Reactive/ Non Soluble

**11. TOXICOLOGICAL INFORMATION****Possible Health Effects**

Skin	:	No effect
Eyes	:	Irritation
Inhalation	:	No Chocking Hazard
Toxicity	:	Non-Toxic

**12. ECOLOGICAL IMPACT**

Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.  
No Negative Ecological Impact, Data not Available

**13. WASTE DISPOSAL**

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator, equipped with an afterburner and scrubber

**14. TRANSPORT INFORMATION (UN ORNEK OLARAK VERİLMİŞTİR)**

HS Code	:	28256020
CAS	:	114168-16-0
Proper Shipping Name	:	Zirconium (IV) Oxide -Yttria Stabilized
Air Transport (ICAO & IATA)	:	Specialty Chemicals
Class	:	Non Hazardeous
Packing group	:	Normal Packing
Transport information	:	Not regulated for IATA (AIR)

## 15. OHTER REGULATORY INFORMATION

Federal and State Regulations: TSCA 8(b) inventory: Zirconium (IV) Oxide -Yttria Stabilized

Other Regulations: EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada)

DSCL (EEC):

R36- Irritating to eyes

S2- Keep out of the reach of children

S46- If swallowed, seek medical advice immediately & show container or label

HMIS (U.S.A.):

Health Hazard: 1

Fire Hazard: 0

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 1

Flammability: 0

Reactivity: 0

Specific hazard:

Protective Equipment:

Gloves.

Lab coat.

Dust respirator. Be sure to use an approved/certified respirator or equivalent.

Splash goggles.

## 16. OTHER INFORMATION

**References:** Not available

**Other Special Considerations:** Not available