

# MATERIAL SAFETY DATA SHEET

**BARIUM TITANATE NANOPOWDER**  
**(BaTiO<sub>3</sub>, Purity:99.9%, APS:50nm)**  
**Stock #: NS6130-02-224**

## 1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY

Product Name : Barium Titanate Nanopowder  
 Use : Research and Development  
 Address : Nanoshel LLC  
 3422 Old Capitol Suit 1305  
 Willmington DE – 19808  
 United States

Emergency : +1.532.253.9878



## 2. COMPOSITION & INFORMATION ON INGREDIENTS

Chemical Characterisation : BaTiO<sub>3</sub>  
 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**

### **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   | : | Powder   |
| Colour | : | White    |
| Odour  | : | No Odour |

### Safety Related Information

|               |   |         |
|---------------|---|---------|
| FlashPoint    | : | N/A     |
| Boiling Point | : | N/A     |
| Melting Point | : | 1625 °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 |

## 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                     | : | 293332                     |
| CAS                         | : | 12047-27-7                 |
| Proper Shipping Name        | : | Barium Titanate Nanopowder |
| Air Transport (ICAO & IATA) | : | Compound Nanopowder        |
| Class                       | : | Non Hazardeous             |
| Packing group               | : | Normal Packing             |

## **15. OHTER REGULATORY INFORMATION**

Federal and State Regulations: TSCA 8(b) inventory: Barium Titanate Nanopowder

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