## MATERIAL SAFETY DATA SHEET

# MANGANESE OXIDE NANOPARTICLES Stock #: NS6130-03-388

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

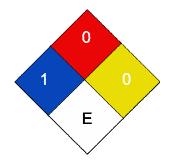
Product Name : Manganese Oxide Nanopowder Use : Research and Development

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 : MnO<sub>2</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 : Imediate 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 : Dark Brown/Gray

Odour : No Odour

**Safety Related Information** 

FlashPoint : N/A
Boiling Point : N/A
Melting Point : 535 °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 : 28201000 CAS : 1313-13-9

Proper Shipping Name : Manganese Oxide Nanopowder

Air Transport (ICAO & IATA) : Oxide Nanopowder 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: Manganese Oxide 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