# MATERIAL SAFETY DATA SHEET

## NICKEL ZINC IRON OXIDE NANOPOWDER
(Ni0.5Zn0.5Fe2O4, Purity: 99.9%)

**Stock #: NS6130-02-230**

## 1. IDENTIFICATION OF THE PRODUCT AND THE COMPANY

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Nickel Zinc ferrite Nanopowder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use</td>
<td>Research and Development</td>
</tr>
<tr>
<td>Address</td>
<td>Nanoshel LLC</td>
</tr>
<tr>
<td></td>
<td>3422 Old Capitol Suit 1305</td>
</tr>
<tr>
<td></td>
<td>Willmington DE – 19808</td>
</tr>
<tr>
<td></td>
<td>United States</td>
</tr>
<tr>
<td>Emergency</td>
<td>+1.532.253.9878</td>
</tr>
</tbody>
</table>

## 2. COMPOSITION & INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Characterisation</th>
<th>Ni&lt;sub&gt;0.5&lt;/sub&gt;Zn&lt;sub&gt;0.5&lt;/sub&gt;Fe&lt;sub&gt;2&lt;/sub&gt;O&lt;sub&gt;4&lt;/sub&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous Ingredients</td>
<td>Nil</td>
</tr>
</tbody>
</table>

## 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 : Dark Brown
Odour : No Odour

**Safety Related Information**
FlashPoint : N/A
Boiling Point : N/A
Melting Point : N/A
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 : 282110.10
CAS : 12645-50-0
Proper Shipping Name : Nickel Zinc Ferrite
Air Transport (ICAO & IATA) : Compound Nanopowder
Class : Non Hazardeous
Packing group : Normal Packing
15. OTHER REGULATORY INFORMATION

Federal and State Regulations: TSCA 8(b) inventory: Nickel Zinc ferrite 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