

## ZEOMANGAN Material Safety Data Sheet

### 1. Identification of the material and company

|                    |                                                                                                      |
|--------------------|------------------------------------------------------------------------------------------------------|
| Material identity: | ZEOMANGAN                                                                                            |
| Producer/Supplier: | E-Rotek Water Systems Co., Ltd.<br>No.2,S. 1st Rd., Pingtung City, Pingtung County 900, Taiwan (ROC) |
| Phone/Fax:         | 886-8-7511181/886-8-7513525                                                                          |

### 2. Hazards Identification

**Inhalation:**

Excessive concentrations of a nuisance dust may cause nuisance condition such as coughing, sneezing, and nasal irritation.

**Ingestion:**

Non-toxic. Large oral doses may cause irritation to the gastrointestinal tract.

**Skin Contact:**

Not expected to be a health hazard from skin exposure. May cause mild irritation and redness.

**Eye Contact:**

No information found, but presumed to cause mechanical irritation.

**Aggravation of Pre-existing Conditions:**

No information found.

### 3. Composition/Information on Ingredients

|                 |           |             |
|-----------------|-----------|-------------|
| CAS NO.         | 1313-13-9 | 112926-00-8 |
| Ingredient      | Manganese | Silica      |
| Content(mg/15g) | 80%       | 20%         |

### 4. First Aid Measures

**Inhalation:**

Remove to fresh air. Get medical attention for any breathing difficulty.

**Ingestion:**

Not expected to require first aid measures. If large amounts were swallowed, give water to drink and get medical advice.

**Skin Contact:**

Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.

**Eye Contact:**

Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

### 5. Fire Fighting Measure

**Fire:**

Not considered to be a fire hazard.

**Explosion:**

Not considered to be an explosion hazard.

**Fire Extinguishing Media:**

Use any means suitable for extinguishing surrounding fire.

**Special Information:**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

### 6. Accidental Release Measure

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

## 7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

## 8. Exposure Controls and Personal Protection

### Personal Respirators (NIOSH Approved):

If the exposure limit is exceeded and engineering controls are not feasible, a half facepiece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece particulate respirator (NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

### Skin Protection:

Wear protective gloves and clean body-covering clothing.

### Eye Protection:

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

## 9. Physical and Chemical Properties/ Characteristics

**Appearance :** Black Nodular Granules, Sand-like in Appearance

**Odor :** No Odor

**Boiling Point :** None

**Specific Gravity :** 2.6

**Vapor Pressure :** N/A

**Percent Volatile by Volume :** None

**Solubility in Water :** 0%

**Vapor Density :** N/A

## 10. Stability and Reactivity

### Stability:

Stable under ordinary conditions of use and storage.

### Incompatible Material:

Avoid contact with hydrochloric acid as gaseous chlorine may be produced.

### Hazardous Polymerization:

Will not occur.

### Incompatibilities:

Strong acids, fluorine, ammonium salts, magnesium with hydrogen.

### Conditions to Avoid:

Avoid contact with concentrated hydrochloric acid (HCl).

## 11. Toxicological Information

**Effects of Overexposure :** Inhalation – normal nuisance dust symptoms

**Eye Contact :** Will act as irritant

**Ingestion :** Non – toxic

**Skin Contact :** No acute effects

**Threshold Limit Value :** None

## 12. Ecological Information

**Environmental Fate:** No information found.

**Environmental Toxicity:** No information found.

### 13. Disposal Information

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

### 14. Transport Information

Not regulated.

### 15. Regulation Information

Not regulated.

### 16. Other Information

- \* The information provided is given in good faith and is based on our actual knowledge.
- \* This is not a technical sheet for use of the product.
- \* This sheet does not exempt the user from knowing and applying all the relevant regulations and from taking all the relevant safety precautions.

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