

G4 RE Magnets

# **G4 RE Magnets - Raw material - Safety Data Sheet**

### 1. Identification of Substance

Grade 4 Rare Earth Neodymium Magnets – 25mm OD x c/s 6.2 ID x 5mm (Axis) 11.00 Kg Pull Force – Flush on Steel Surface.

Br = 12500 – 12800 Gs / BHc ≥11600 Oe / BH Max 38 – 41 MGOe

North Pole marked BLACK and South Pole marked RED.

### 2. Hazard Identification

Dipping into water or acid for a long duration can form hydrogen gas.

#### 3. First Aid Measures

Treatment for eye contact: Flush well with clean water and obtain medical attention.

Treatment for skin contact: N/A for as a solid; for dusts or particles, wash with soap and water. Obtain medical attention if symptoms persist.

Treatment for inhalation (breathing): Will not occur

Treatment for ingestion: Induce vomiting immediately. Rinse mouth well with clean water. Obtain medical attention

### 4. Fire Fighting Measures

Suitable extinguishing media: Dry sand or dry chemical powder. Fire-fighting Measures: Incombustible in a solid state.

#### 5. Accidental Release Measures

### **Personal Precautions:**

Keep the magnetized magnets away from a person having an electric/electronic medical device, such as pacemaker.

Environmental Precautions: No special attention needed

Method for Removal: In a solid state; take safety measures for handling; and collect into a closed container.



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## 6. Handling and Storage

### **Handling Precautions:**

- Wear protective gloves if handling directly for a long time.
- Be careful not to pinch fingers or any parts of your body, when handling and assembling the magnetized NdFeB, because the NdFeB generates a very strong force, attracting other magnets and other iron-containing material.
- Do not allow the magnet to come close to fixed a floppy disk, an electric watch or a magnetic card, as it can destroy or alter the magnetic data
- Do not allow the magnet to come close to a person with an electric/electronic medical device, such as pacemaker.

### Storage:

- Store in a dry place free from corrosive atmosphere.
- Keep away from any possible contact with water.
- With magnetized NdFeB, store in a closed container made of non-magnetic material and clearly state on the outside "strong magnet inside"

### 7. Exposure Controls and Personal Protection

## **Precautionary Measures:**

- Ventilation
- Local Exhaust Ventilation: None required.
- Special Ventilation: None required.
- Mechanical(General)Ventilation: None required

Respiratory Protection: N/A

Eyes Protection: N/A (Safety glasses when machining or grinding)

Skin Protection: Rubber or plastics gloves



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### 8. Physical and Chemical Properties

Phase appearance: solid

**Odour: Inodorous** 

Melting Point: >1400oC Density: 7.4-7.6g/cm3

Solubility in water: insoluble

Solubility in acid: soluble

**Note:** Dipping into water or acid for a long time can rust.

### 9. Stability and Reactivity

Stability and Reactivity:

- Stable in normal atmosphere.
- Rusting gradually in water or oxygen gas
- React with acids, oxidizing agents or halogens.

#### Condition to avoid:

- Do not use or store in the conditions as follows;
- Acidic, alkaline or organic solvent, water or oil, electrically conductive liquid, hydrogen or corrosive gases, in radioactive rays exposures

Materials to avoid: acids, oxidizing agents or halogens.

### 10. Toxicological Information

Carcinogenic\Teratogenic: N/A

Effect and Hazards of Overexposure (Acute and Chronic)

Effect and Hazards of Skin Contact: This product is considered safe if used according to the directions. Effect and Hazards of Eye Contact: This product is considered safe if used according to the directions.

Effect and Hazards inhalation (Breathing): Will not occur

Effect and Hazards of Ingestion (Swallowing): Consult a physician.

Effect for Prolonged Exposure: This product is considered safe if used according to the directions.



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## 11. Ecological Information

Mobility: N/A

Persistence/Degradability: N/A

Bioaccumulation: N/A

Bco-toxity: N/A

Other data (ex. Ecological limit): N/A

## 12. Disposal Considerations

### Disposal methods:

- Dispose in closed container made of non-magnetic material.
- Keep away from any possible contact with water.

### Disposal regulation:

• Disposal must be in accordance with applicable federal, state/provincial and local law and regulations if any

### 13. Transport Information

Pack up prudently so as to prevent products from breakage Avoid high temperature and /or humidity. Regulations for transport: When transport magnetized NdFeb by air, follow the dangerous goods regulations of IATA (International Air Transport Association)

### 14. Regulations

The above information relates to this specific material itself. It may not be valid for this material, if used in combination with any other material or in any process. It is the user's responsibility to satisfy himself as to the suitability and completeness of this information for his own particular use.