MATERIAL SAFETY DATA SHEET (MSDS)

**Warning** strong magnets can affect the operation of pace makers do not handle, seek medical advice.

**SECTION 1- Product Identity**

Company Name: Ican  
Company Address: 2151 Louie drive, P.O.box 32036 west kelowna BC V4T3G2  
Product Name: Nd-Fe-B Rare Earth Neodymium Magnet

**SECTION 2 - INGREDIENTS**

Nd: 27-31%,  
Dy-Tb: 1.5-3.5%  
Al: 0.1-0.8%  
B: 1.0-1.2%  
Fe: 61.5-66.8%  
Nb: 0.3-1.4%  
Co: 1.0-3.5%  
Cu: 0.1-0.3%

**SECTION 3 - PHYSICAL CHARACTERISTICS**

Boiling Point: N/A  
Vapor Pressure: (mm Hg.): N/A  
Vapor Density: (air = 1): N/A  
Solubility in Water: Not soluble  
Appearance: As ground, silver-gray, as sintered, matte black  
Specific Gravity: 7.4  
Melting Point: Above 2500o F  
Evaporation Rate: N/A  
Odor: No odor

**SECTION - FIRE AND EXPLOSION HAZARD DATA**

Flash Point: N/A  
FLAMMABLE LIMITS: N/A  
LEL: N/A  
UEL: N/A  
Extinguishing Media: Dry chemical or sand  
Special Fire Fighting Procedures: Do not use water on smoldering, burning powder.

**UNUSUAL FIRE AND EXPLOSION HAZARD(S):**  
Dry powders of neodymium magnets will oxidize, smolder, and burn in
the presence of air or oxygen. Maintain powders in water slurry or in inert atmospheres of nitrogen or argon to prevent spontaneous combustion. Magnets may spark on impact. Handle carefully in explosive atmospheres.

SECTION 5 - REACTIVITY DATA

Stability: stable
Avoid elevating temperatures above 150°C.

SECTION 6 - HEALTH HAZARD DATA

HEALTH HAZARDS (ACUTE AND CHRONIC): Prolonged skin contact may cause irritation or allergenic dermatitis.

SECTION 7- PRECAUTIONS FOR SAFE HANDLING AND USE

SPILL PROCEDURE:
Sweep up dust and store in water slurry or sealed containers utilizing inert atmosphere such as argon or nitrogen to prevent spontaneous combustion.

WASTE DISPOSAL METHOD:
Dispose in accordance with federal, state, and local regulations.

SECTION 8 - CONTROL MEASURES

RESPIRATORY PROTECTION: Use NIOSH approved respirator when TLV is exceeded.

EYE PROTECTION: Use safety glasses or goggles when handling magnets.

SKIN PROTECTION: Protective gloves are recommended when handling magnetized part or parts which may have sharp edges.

VENTILATION: Use wet machining/grinding processes and adequate local ventilation to reduce dust levels.

SECTION 9 – Storage
Magnetized products should be packed with lining and shielding
Products should be stored in ventilated, dry and anti-collision places
Move carefully with shake-proof, collision-proof, and water-water proof measure

SECTION 10 – SPECIAL PRECAUTIONS
Precautions to Be Taken in Handling and Storage: Store in a cool, dry place in tightly closed containers. Air and moisture sensitive. Store away from oxidizers and other materials listed under incompatibility. STORE UNDER ARGON OR OTHER INERT ENVIRONMENT. Avoid breathing dusts. Avoid direct or prolonged contact with skin and eyes. Wash hands thoroughly after handling. Do not rub eyes with soiled hands.

Other Precautions: Avoid creating dusts as this product, like most materials in powder form, is capable of creating a dust explosion.

Work Practices: Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet. Wash exposed skin promptly to remove accidentally splashes of contact with this material. Maintain a sink, safety shower and eyewash fountain in the work area. Have oxygen readily available.

International Shipments

Magnets being shipped on an international flight MUST BE DECLARED AS A DANGEROUS GOODS ARTICLE (Dangerous goods declaration form must accompany the package).

Check the regulations to determine if the airport that receives the shipment considers magnets acceptable, as some airports do NOT allow magnets to be shipped in.

The boxes must be checked for total field emission after being packaged.

If the field exceeds 0.002 gauss at 7 feet from the package (rotated 360° in both planes), follow packaging instructions 902 in the IATA Dangerous Goods Regulation.

If the total field emission exceeds 0.00525 gauss at 15 feet from the package in any plane, the package cannot be accepted for air shipment. If the 0.00525 gauss requirement is met (the magnetic field emission is less than 0.00525 in any plane), you can ship the package by air on an international flight PROVIDED you fill the Dangerous Goods Declaration Form, and label the package appropriately. The package(s) must have the "Handling Label for Class 9 - Magnetized Material" label affixed on them.

Refer to the IATA Dangerous Goods Regulations publication (you can get a copy of this from your freight carrier or order this from IATA directly).

- UN "Model Regulation": -
- Special precautions for user

Not applicable.

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

- Labeling according to Regulation (EC) No 1272/2008

The substance is not classified and labeled according to the CLP regulation.

- Hazard pictograms

Void

- Signal word

Void

- Hazard-determining components of labeling
WARNING

Neodymium magnets we sell are very strong. Handling them with care is necessary to prevent personal injuries, property damages and magnet damages.

1. Neodymium magnets are brittle; they can be broken or can splinter in a collision. One should wear gloves and protective glasses when handling these magnets, because splinters could disengage and fly from the magnets.

2. Normal Neodymium magnets will lose their magnetic properties if heated above 175°F (80° C). Higher temperature rare earth neodymium magnets are available in our store.

3. The strong magnetic fields of neodymium magnets can damage items such as television, computer monitors, credit cards, bank cards, computers, diskettes and other data carriers, video tapes, mechanical watches, hearing aids, loud speakers and VCRs. Pace-makers may be damaged or switch to "Test Mode" in the presence of a strong magnetic force, if a pace-maker is in use, keep a minimum of 3 feet distance.
4. You should avoid having constant contact with magnets of any size and keep a distance of at least 3 feet to large magnets.

5. Children should not be allowed to handle neodymium magnets as they can be dangerous. Small magnets pose a choking hazard and should never be swallowed or inserted into any part of the body.

6. Under no circumstances should you try to cut, saw or drill the Neodymium magnets! Not only would the magnet break, but the resulting dust from the magnet is very flammable. Neodymium magnets should never be burned, as burning them will create toxic fumes.

**HANDLE WITH EXTREME CAUTION!**

Use personal protection equipment when required. Use good personal hygiene practices. Keep magnetized parts away from mechanical/electronic instruments which may be damaged by high magnetic fields such as cell phones, pacemakers.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide.

Ican shall not be held liable for any damage resulting from handling or from contact with the above product.

Disclaimer: Ican neither assumes nor accepts any liability for damages resulting from the handling or use of magnets. With your purchase, the buyer confirms that you have read and understood the following warnings; the buyer agrees that he/she is responsible for all damages and injuries caused by the magnets, which include personal injuries, property damages and magnet damages. The buyer must agree with the terms before purchase. Pull forces we provided is estimates only, we are not responsible for any inaccuracy of magnet pull force. Please test the pull force before any usage.