Report No.: 10041921-112

MSDS Report

Sample Description

NDFEB PERMANENT MAGNET

Applicant

magnets4you gmbh Bgm.-Dr.-Nebel-Str. 15a 97816 Lohr a. Main

Pony Testing International Group www.ponytest.com

Material Safety Data Sheet

NdFeB PERMANENT MAGNET

Section 1 - Chemical Product and Company Identification

Sample Name: NEDFEB PERMANENT MAGNET

Section 2 - Composition, Information on Ingredients

	Percent		
Chemical Name	*(by weight)	CAS No.	EC#
Neodymium (Nd)	*28%	7440-00-8	231-109-3
Iron (Fe)	*65%	7439-89-6	231-096-4
Boron (B)	1%	7440-42-8	231-151-2
Other	6%	N/A	N/A

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

If contacted with dust or clips from mechanical processing, may cause eyes and skin irritation. If inhaled dust, may cause respiratory irritation. Children and adults should not ingest magnets or place magnets in any body orifice such the ear, nose or mouth.

Target Organs: Eye, skin, ingestion, respiratory tract.

UN Hazard Sorts: 9.

Potential Health Effects:

- ** Eye: No health effects are expected when used under reasonable conditions. If contacted with dust or clips from mechanical processing, causes eye irritation.
- * Skin: No health effects are expected when used under reasonable conditions. Repeated or prolonged contact with dust or clips from mechanical processing, may cause skin irritation. Handling of sharp edges may cause cuts.
- Ingestion: Ingestion of this material is unlikely.
- * Inhalation: No health effects are expected when used under reasonable conditions. If inhaled dust/fumes from mechanical processing, may cause metal fume fever. Symptom may contain chills, fever, and respiratory tract irritation.

Section 4 - First Aid Measures

Eyes: If dust contact with eyes, immediately flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Avoid rubbing eyes. Seek medical attention if necessary.

Skin: If contact with hot material, cool the burn area by flushing with large amounts of water. DO NOT attempt to remove anything from the burn area. Cover the burn area loosely with a sterile dressing, if available and seek medical attention.

Inhalation: If inhaled, remove to fresh air. Seek medical aid if cough or other symptoms appear.

Ingestion: Ingestion of this material is unlikely. If it does occur, seek medical attention.

Section 5 - Fire Fighting Measures

General Information: The product is not suspected to easily cause fire.

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Extinguishing Media: Use dry sand or Class D extinguishing agents on dusts, fines or molten metal. DO NOT use halogenated agents, water and carbon dioxide on small chips, dusts or fines.

Section 6 - Accidental Release Measures

General Information: Review Section 5 and Section 7 sections before proceeding with clean-up. Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Provide ventilation. Remove all sources of ignition. Collect up, and then place into a suitable container for disposal or recycling. Avoid generating dusty conditions. Provide ventilation. Use caution in handling as edges are very sharp.

Section 7 - Handling and Storage

General Information: This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any legal regulation.

Storage: Store in a cool, dry, well-ventilated area away from incompatible substances, heat or flame. Magnets should be keeping away from electronic equipment, computer discs, credit cards, video tapes, and other magnetic media. Keep away from children.

Handling: Use with appropriate ventilation. Treat carefully, avoid physical damage. Keep away from incompatible substances, heat or flame. Minimize dust generation and accumulation. Avoid dust contact with eyes. Avoid breathing dust and fume. Avoid ingestion. Avoid contact with sharp edges or heated metal. Individuals with pacemakers or internal medical devices should use caution when handling strong magnets. Magnetic fields may affect the operation of these devices.

Section 8 - Exposure Controls, Personal Protection

Exposure Limit:

Composition: Neodymium (Nd)

*- No date available.

Composition: Iron (Fe) (as dust, reference as Iron oxide)

- *- TLV-TWA 5 mg/m³(ACGIH)
- *- REL-TWA 5 mg/m³(NIOSH)
- *- PEL-TWA 10 mg/m³(OSHA)

Composition: Boron (B)

*- No date available.

Monitoring Methods: No information found.

Engineering Controls: Use adequate general or local exhaust ventilation when cutting, grinding, sanding and/or welding product. A safety shower, eyewash or another source of running water should be available in areas where grinding, sanding, cutting and/or welding operations take place.

Personal Protective Equipment:

- * Eyes: Use appropriate safety glasses if there is a potential for exposure to particles/dust or when handling large magnets.
- * Skin and Clothing: Wear cut-resistant gloves and appropriate protective clothing. It is essential to wear gloves to prevent burns from heated material.
- * Respirators: An appropriate respirator or mask should be used whenever workplace conditions warrant a respirator's use. A full face positive pressure supplied-air respirator or a self contained breathing apparatus should be used when fire.
- * Other Protection: To maintain good health habits. No smoking or eating scene work.

Section 9 - Physical and Chemical Properties

Physical State: Black solid.

Odor: Odorless.

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Molecular Formula: Mixture. Molecular Weight: N/A

Flash Point N/A

PH: N/A

Specific Gravity/Density: N/A

Viscosity: N/A Boiling Point: N/A

Freezing/Melting Point: N/A Vapor Density (Air=1): N/A Saturated Vapor Pressure: N/A

Octanol / Water Distribution Coefficient: N/A

Ignition Temperature (°C): N/A Explosion Limits Lower: N/A Explosion Limits Upper: N/A Critical Pressure (Mpa): N/A Solubility: Insoluble in water

Chemical Uses: Electrical machine

Section 10 - Stability and Reactivity

*Chemical Stability: Stable under normal condition.

Conditions to Avoid: Incompatible materials, dust generation, excess heat. Incompatibilities with Other Materials: Strong oxidants, acids, halogens,

corrosive materials and bases.

Hazardous Decomposition Products: Oxides of iron and etc.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

Toxicological Information:

Composition: Neodymium (Nd)
*- RTECS# QO8575000
Composition: Iron (Fe)
*- RTECS# NO4565500

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*- LD50: 30 g/kg (Oral, rat) Composition: Boron(B)

*- RTECS# ED7350000

*- LD50: 560 mg/kg (Oral, mouse)
*- LD50: 650 mg/kg (Oral, rat)

*- LD50: 310 mg/kg (Oral, rabbit)

Carcinogenicity:

Composition: Neodymium (Nd)

*- Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Composition: Iron (Fe)

*- Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Composition: Boron (B)

*- Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Sensitization Rate: Not available. Teratogenicity: Not available.

Section 12 - Ecological Information

Ecological Toxicity: Not available. Ecological Degradation: Not available. Biology Degradation: Not available.

Section 13 - Disposal Considerations

All permanent magnets should be thermally demagnetized prior to disposal. Alternatively, all strong permanent magnets should be placed in a steel container prior to disposal so the magnets do not attract waste disposal equipment or refuse containers. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed. RCRA U-Series: None listed.

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Section 14 - Transport Information

Regulated as a hazardous material for transportation. (IATA DGR)

UN Number: 2807

UN Proper Shipping Name: Magnetized material

UN Classification: 9

Packing Instruction: 902

Packaging Sign:

Packing Group: N/A
Transport Fashion: By air

Shipping Notice: During the process of shipping should ensure the integrity of the packaging, loading should be conservative, and must prevent

sunshine, the rain and high-temperature.

Section 15 - Regulatory Information

Regulatory Information: Reference to the local, national, US, EU, CA and

international regulations.

TSCA: CAS# 7440-00-8, CAS# 7439-89-6

and CAS# 7440-42-8 are listed.

DSL: CAS# 7440-00-8, CAS# 7439-89-6

and CAS# 7440-42-8 are listed.

OSHA: CAS# 7439-89-6 is listed.

CAS# 7440-00-8 and CAS# 7440-42-8 are unlisted.

*California Prop 65: CAS# 7440-00-8, CAS# 7439-89-6

and CAS# 7440-42-8 are unlisted.

IECSC: CAS# 7440-00-8, CAS# 7439-89-6

and CAS# 7440-42-8 are listed.

European Labeling in Accordance with EC Directives:

<u>Hazard Symbols: None.</u> Risk Description: None. Report ID: 10041921-112

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Safety Description: None.

Section 16 - Additional Information

Issue Time: 2010-04-23

Issue Department: Technical department

Data review unit: Modification record: Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Other Information:

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ACGIH: ( American Conference of Governmental Industrial Hygienists ); CAS: ( Chemical Abstracts Service ); DSL: ( the Domestic Substances List of Canada ); EC: ( European Commission ); IARC: ( International Agency for Research on Cancer ); IATA: ( International Air Transport Association ); IECSC: ( Inventory of Existing Chemical Substances in China ); IMDG: ( International Maritime Dangerous Goods ); LD50: ( Lethal dose, 50 percent kill ); MAC: ( Maximum allowable concentration ); NDSL: ( the Non-domestic Substances List of Canada ); NIOSH: ( US National Institute for Occupational Safety and Health ); NTP: ( US National Toxicology Program ); OSHA: ( US Occupational Safety and Health ); PEL: (Permissible Exposure Level); REL: ( Recommended Exposure Limit ); RTECS: ( Registry of Toxic Effects of Chemical Substances ); STEL: ( Short Term Exposure Limit ); TDG: * ( Recommendations on the TRANSPORT OF DANGEROUS GOODS Model Regulations ); TSCA: ( Toxic Substances Control Act of USA ); TWA: ( Time Weighted *Average ); TLV: ( Threshold Limit Value )
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