



Material Safety Data Sheet

1. Product and Company Identification

Product Name: HXN (Material N°40)

Company Name: CANAC Co., Ltd.

Address: 1-20-60, Miyauchi, Nakahara-ku, Kawasaki-shi, Kanagawa, JAPAN, 211-0051

2. Chemical Identity

Element	Quantity
Nd	29.7%
Fe	64.5%
B	1.1%
Dy	3.0%
Nb	1.2%
Al	0.5%

3. Hazard Identification

- Special Hazard Identification: Dry power from the product is inflammable.
- Physical and Chemical Hazard Identification: Do not use in water or oxygen. Otherwise hydrogen gas will be generated.
- Irritations may be caused by skin contact.

4. Emergency First Aid Measures

- Inhalation: Rinse and call a physician
- Skin Contact: Call a physician immediately when skin irritation is caused.
- Eye Contact: Immediately flush eyes with water and call a physician.

5. Fire-fighting Measures

Extinguishing Media: Dry sand or dry chemical powder.

Do not use water, carbon dioxide gas, halogen gas and quenching liquid

Fire-fighting Measures: Incombustible in a solid state.

However combustible in a dust or small particle state.

In case of fire, cover with dried sand and move every combustible from fire areas.

6. Accidental Release Measures

Method for Removal: In a solid state:

- Take safety measures for handling.
- Collect into a closed container.

In a dust or particle state:

- Maintain adequate ventilation
- Take safety measures for handling.
- Collect into a sealed container
- Do not use a vacuum cleaner.

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

7. Handling and Storage

Handling:

- Wear protective gloves, in case of handling directly for a long duration.
- Be careful not to pinch fingers or any parts of your body, when handling and assembling the Magnet, because the Magnet generated very strong force attracting other Magnet and other ferromagnetism materials.
- Do not allow the magnet to come close to fixed a floppy disk, and electric watch or a magnetic card, since it can destroy or alter the magnetic data.
- Do not allow the magnet to come close to a person having an electric/electronic medical device, such as pacemaker
- Keep away from the children
- Keep the distance among each product more than 30 inch When assembling the products

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 state clearly outside 'strong magnet inside'.

Others: -Do not peel off or cut NdFeB. If you do, rusting will occur or the dust or small particles by cutting may catch fire.

8. Exposure Controls/Personal Protection

Engineering Measures: As dust or particles generated by machining or grinding, use a closed or ventilated machine.

Exposure Guidelines: N/A

Personal Protective Equipment

- Respiratory Protection: N/A (Dust respirator when machining or grinding)
- Skin Protection: Be careful not to pinch fingers or any parts of your body, when handling and assembling the Magnet, because the Magnet generated very strong force attracting other Magnet and other ferromagnetism materials
- Hand Protection: Rubber or Plastics gloves.
Be careful not to pinch fingers
- Eye Protection: N/A (Safety glasses when machining or grinding)

9. Physical and Chemical Properties

Physical State: Solid

Color: Black

Melting Point: Approx. 1350 Celsius

Explosion Properties: N/A (May be dust explosive in case of dust)

Density: 7.4-7.6 g/cm³

Solubility in water: Insoluble

Solubility in acid: Soluble

Note: Dipping into water or acid for a long time can rust and/or elute boron.

10. Stability and Reactivity

Stability and Reactivity: Stable in normal atmosphere.

Rusting gradually in water or oxygen gas.

React gradually with acids, oxidizing agents or halogens.

Condition to Avoid: Do not use or store in the conditions as follows:

Acidic, alkaline or oxidizing agents, electrically conductive liquid, hydrogen or corrosive gases, in radioactive rays exposures

Materials to avoid: Acids, oxidizing agents or halogens

Hazardous decomposition products: Dipping into water or acid for a long time can rust and/or elute boron.

Reaction with strong acid can occur hazardous fume (ex-Neodymium oxide)

Bombarding in an organic solvent containing halogen can explode.

11. Toxicological information

Acute toxicity: N/A

Sensitization: Contact for a long duration may cause skin rash depend on personal sensitivity

Chronic toxicity: N/A

Carcinogenicity: N/A

Reproduction toxicity: N/A

12. Ecological information

Mobility: N/A

Persistence/Degradability: N/A

Bioaccumulation: N/A

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

13. Disposal consideration

Disposal methods:

- Disposal in closed container made of non-magnetic material.
- Keep away from any possible contact with water.
- Avoid cutting or smashing magnet as sparks thereof may cause fire in the inflammable atmosphere.

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

14. Transport information

- Pack up prudently so as to prevent products from breakage.
- The relatively low field strength generated, they are below the limits by U.S. Hazardous Materials Regulations 49 CFR 173.21 (less than 0.00525 gauss measured at 4.5m from any surface of the package) and fall outside the scope of Class 9 DG Magnetized Material and no special precautions are needed for shipping

15. Regulatory information

Follow all regulations in your country

16

Other Information

This information is furnished without warranty, express or implied, except that it is accurate to the best knowledge of MISUMI Group Inc., and to the reference to Material Safety Data Sheet issued by CANAC Co., Ltd. It relates only to the specific material designed herein, and does not relate to use in combination with any other material or process. MISUMI Group Inc. assumes no legal responsibility for use or reliance upon this information.

In other points that involved technical and specification knowledge of the product will need supplier to verify and as for point 14, I think state "Proper shipping package to avoid breakage is sufficient" and whether fall out of DG9 classification, supplier also need