



1. General Information

Item Name: PERMANENT MAGNET
Company's Name: Allstar Magnetics, LLC
Company's Street: 6205 N.E. 63rd Street
Company's City : Vancouver, WA 98661
Company's Country: USA
Company's Zip Code: 98661
Date MSDS Prepared:
Safety Data Review Date:
Supply Item Manager:
MSDS Preparer's Name:

2. Ingredients / Identity Information

Proprietary: NO
Ingredient: Cobalt
Ingredient Sequence Number: 01
Percent: 24.0
Ingredient Action Code:
Ingredient Focal Point: D
Other Recommended Limit: NONE RECOMMENDED

Proprietary: NO
Ingredient: Nickel
Ingredient Sequence Number: 02
Percent: 14.0
Ingredient Action Code:
Ingredient Focal Point: D
Other Recommended Limit: NONE RECOMMENDED

Proprietary: NO
Ingredient: Aluminum
Ingredient Sequence Number: 03
Percent: 8.0
Ingredient Focal Point: D
Other Recommended Limit: NONE RECOMMENDED

Proprietary: NO
Ingredient: Copper
Ingredient Sequence Number: 04
Percent: 3.0
Ingredient Action Code:
Ingredient Focal Point: D
Other Recommended Limit: NONE RECOMMENDED

Proprietary: NO
Ingredient: Iron
Ingredient Sequence Number: 05
Percent: balance
Ingredient Action Code:
Ingredient Focal Point: D
Other Recommended Limit: NONE RECOMMENDED

3. Hazards Identification

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The magnetisms of Alnico magnets are not extremely powerful. But big block magnets may cause injury. Fingers and other body parts can be pinched between two large magnets. Also may affect some kinds of electronics or other implanted medical devices.

4. First-Aid Measures

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Eye Contact: Small pieces, chips or dust from magnet material may cause irritation. Wash eyes gently under running water for 15 minutes or more to remove. If symptoms persist, seek medical attention.

Skin Contact: Prolonged skin contact may cause irritation or allergic dermatitis, especially for individuals with nickel allergy. In the case of contact with chips or dust from a broken magnet, brush off powders and wash well with soap and water.

Inhalation: Rare. If vapors or dusts have been inhaled, move individual to fresh air and seek medical attention.

Ingestion: If a magnet is swallowed, seek medical attention immediately. If multiple magnets are ingested, magnets can stick together through intestinal walls, causing serious infections and death. Seek immediate medical attention.

Information for Doctors: Ingestion of multiple magnets can pose a serious risk. Consider consulting the algorithm presented in, "Management of Ingested Magnets in Children," (Hussain et al., 2012).

5. Fire-fighting Measures

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Product is not combustible. Fine metal powders produced by dry abrasive grinding or machining may cause explosive hazard. Control dust levels by utilizing wet machining or grinding processes local exhaust ventilation and good housekeeping. Keep dusts from ignition sources. If dusts should combust, use dry chemical extinguishing media, wear protective breathing apparatus and heat resistant clothing.

6. Accidental Release Measures

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Personal precautions, protective equipment and emergency procedures:
No special measures required. See Section 7 for information on safe handling.
Environmental precautions:
Not applicable.
Methods and Material for containment and cleaning up: No special measures required. Pick up mechanically.
Reference to other sections: See Section 7 for information on safe handling.

7. Handling and Storage

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Large magnets can attract to one another. Strong attractive forces can cause injury. Impacts of magnets can eject chips or bits of magnet material at speed – eye protection should be used.
The magnetic fields of large magnets may affect the operation of implanted medical devices such as pacemakers and ICDs.

8. Exposure Controls / Personal Protection

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This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions. No engineering controls are necessary.
Protection of hands: Avoid repeated and prolonged contact with the skin, especially if user has known nickel allergies. Protective gloves may be used.
Eye protection: Safety goggles should be worn when handling magnetized magnets. Keep mechanical/electrical instruments which may be damaged by high magnetic fields at some distance away from large block magnets.

9. Physical and Chemical Properties

Information on basic physical and chemical properties. Physical state: Solid
Color: Silver/gray metal
Odor: Odorless
Density: 7.2-7.5 grams per cubic centimeter
Specific Gravity: 7.2-7.5 (H₂O = 1)
Solubility: Not water soluble
Melting Point: Above 1200°C

10. Stability and Reactivity

This product is stable, not easy to react within the air.
Condition to Avoid (Stability): Dust In Air
Materials to Avoid: Strong Acids
Hazardous Decamp Products: Hazardous Fumes May Occur When Machining.
Hazardous Poly Occur: No
Conditions to Avoid (Poly): Not Relevant

11. Toxicological Information

The products compounds are of low to moderate toxicity. Roughly 1/2 of a magnet is composed of iron. Inhalation overexposure of iron dust may cause siderosis, a benign pneumoconiosis. Nickel is a listed carcinogen.

12. Ecological Information

No specific information available for this product.

13. Disposal considerations

Dispose in accordance with federal, state and local regulations.
Large, powerful magnets may be demagnetized with high temperatures before disposal to prevent possible handling injury.

14. Transport Information

Magnets can generate magnetic fields that may affect navigation equipment. Magnets are able to attract ferromagnetic materials.

For air transport, Alnico magnets may or may not require a hazardous material label. See the International Air Transport Association's (IATA) Dangerous Goods Regulations (DGR) and FAA Title 49, Part 173.21.

15. Regulatory Information

The following list of regulations may not be complete and should not be solely relied upon for all regulatory compliance responsibilities. This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory requirements.

This product is in compliance and conforms to the European Union's Restriction of Use of Hazardous Substances in Electrical and Electronic Equipment (RoHS) Directive of 2002/95/EC and 2011/65/EU (RoHS2)

16. Other information

This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use.