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## PERMANENT MAGNET SAFETY DATA SHEET

### SECTION 1 - IDENTIFICATION

PERMANENT MAGNET

### SECTION 2 – HAZARD IDENTIFICATION

Overall Hazard Rating: LOW

Health: slight; Flammability: slight; Instability: low; Special Hazards: None

### SECTION 3 – COMPOSITION ON INGREDIENTS

Ferromagnetic materials / alloys

### SECTION 4 – FIRST-AID 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 keep dust levels to minimum. Work / Hygienic Practices: Use personal protection equipment when required. Use good personal hygiene practices. Keep magnetized parts away from mechanical/electrical instruments which may be damaged by high magnetic fields. Obtain immediate medical attention if magnets are swallowed as they are forced together in the intestines or bowels, squeezing the tissue so that the blood supply is cut off. Ingesting more than one can be life-threatening and cause significant damage within hours.

### SECTION 5 – FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS: N/A Flash Point: N/A Lower Flammability Limit (LFL): N/A  
Upper Flammability Limit (UFL): N/A Extinguishing Media: Dry chemicals without Oxygen Compounds or sand

## MSDS – PERMANENT MAGNET

Special Fire Fighting Procedures: Do not use Halon agents or water on smoldering, burning powder. Unusual Fire and Explosion Hazard(s): Dry powders of neodymium magnets will oxidize, smolder, and burn rapidly 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 6 – ACCIDENTAL RELEASE MEASURES

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.

### SECTION 7 – HANDLING AND STORAGE

WARNING -CERAMIC MAGNETS ARE EXTREMELY POWERFUL! They have very strong magnetic forces which make them attract to other magnets and other ferromagnetic materials such as iron or steel. HANDLE WITH EXTREME CAUTION! Material is brittle and may chip if not handled with care.

### SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Health Hazards (Acute & Chronic): No Known health hazards. Not listed as carcinogen or potential carcinogen. Emergency and First Aid Procedures: Primary route of entry: Inhalation of generated airborne dusts. Any long-term exposure to dusts exceeding recommended TLV levels may result in irritation to upper respiratory tract. Skin: Brush off powders and wash well with soap and water. Eyes: Dust in eyes may cause irritation. Flush with running water for 15 minutes. Use good personal hygiene. Avoid ingestion of dusts by not eating, drinking or smoking in the areas where dusts are generated.

### SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: N/A Vapor Pressure: (mm Hg.) N/A Vapor Density: (air = 1) N/A  
Specific Gravity: (water = 1) 7.4 Melting Point: Above 1000°C (1832°F)  
Evaporation Rate: N/A Odour: No odour Solubility in Water: Not soluble  
Appearance: Silver-grey metal pH: Neutral

### SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable in massive form, no known incompatibilities Conditions to Avoid: Avoid exposure of powdered magnet material to air, oxygen or halogenated hydrocarbons, and to elevated temperatures above 150°C. Incompatibility (Materials to Avoid): Fine powders are incompatible with air, oxygen, halogenated hydrocarbons and strong oxidizers.

MSDS – PERMANENT MAGNET

Fine powders or dusts generated by dry grinding or machining may lead to explosive hazard. Control dust levels by applying wet machining process, local exhaust ventilation and good housekeeping.

SECTION 11 – TOXICOLOGICAL  
INFORMATION N/A

SECTION 12 – ECOLOGICAL  
INFORMATION N/A

SECTION 13 – DISPOSAL CONSIDERATIONS Waste Disposal Method:  
Dispose in accordance with federal, state, and local regulations.

SECTION 14 – TRANSPORTATION INFORMATION  
For air shipment purposes, magnets are considered "dangerous goods". As such, the International Air Transport Association's (IATA) Dangerous Goods Regulations (DGR) must be followed.

SECTION 15 – REGULATORY  
INFORMATION N/A

SECTION 16 – OTHER  
INFORMATION N/A

*The above information is believed to be accurate but does not implicate to be all-inclusive and shall be used only as a guide. Comus Europe Limited shall not be held liable for any damage resulting from handling or from contact with the above product.*