

## Magnet MSDS

### SECTION 1

#### PRODUCT NAME

**Product Name: Sintered Neodymium Iron Boron (NdFeB) Magnet Alloy**

**Label: Apache Pipeline Product. Part No. 95011314 or 95011348**

### SECTION 2

#### HAZARD INGREDIENTS/IDENTITY INFORMATION

Component Chemical Name & Common Names	CAS No.	Concentration (Percentage)
Neodymium	7440-00-8	33%
Iron	7439-89-6	65%
Boron	7440-42-8	1%
Other		1%

### SECTION 3

#### PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	Unknown
Vapor Pressure (mm Hg.)	Unknown
Vapor Density (AIR=1)	Heavier Than Air
Solubility in Water	Not Determined (very low)
Specific Gravity (H2O=1)	7.1 - 7.6
Melting Point	Above 1,000°C
Evaporation Rate (Butyl Acetate=1)	Very Low
Appearance and Odor	Dark Metallic, No Odor



## Magnet MSDS

### SECTION 4

#### FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	n/a
Flammable Limits	n/a
LEL	n/a
UEL	n/a
Extinguishing Media	Dry chemicals for fighting magnesium or metal fires.
Special Fire Fighting Procedures	Isolate and contain burning materials. Smother with Argon gas or non-reactive dry chemicals. Avoid water. Do not use Halon.

### SECTION 5

#### REACTIVITY DATA

Stability	Stable
Incompatibility (Materials to Avoid)	Acids, highly active oxidizers.
Conditions to Avoid	Avoid exposure of powdered magnet material to air, oxygen or halogenated hydrocarbons, and to elevated temperatures above 150 C.
Hazardous Decomposition or Byproducts	Hydrogen may be released when powders react with water.
Hazardous Polymerizations	Will not occur.

### SECTION 6

#### HEALTH HAZARD DATA

Health Hazards (Acute & Chronic)	Prolonged skin contact may cause irritation or allergenic dermatitis.
Emergency and First Aid Procedures	Remove victim from dust and fume environment. Flush skin and eyes with water.



## Magnet MSDS

### SECTION 7

#### PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be taken in case material is released or spilled	Fine chips and powders should be gathered up by a damp mop or broom. Do not use a vacuum cleaner.
Waste disposal method	Metal recycling.
Precautions to be taken in handling and sorting	Powders may ignite and burn. Store under inert gas or vacuum. Storage in water may generate hydrogen gas.
Other precautions	Use water during machining processes to control sparking of the swarf.

### 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.
Work/Hygienic Practices	Avoid skin injuries. If powders generated are inhaled, train workers in safe practices for combustible powders. Magnetized parts are strongly attracted to each other and to steel – handle firmly to avoid injury causing impacts.

## WARNING

### RARE EARTH 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!

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Apache pipeline Product shall not be held liable for any damage resulting from handling or from contact with the above product.

