

## MATERIAL SAFETY DATA SHEET

Approved by US Department of Labor  
"Essential Similar" to Form OSHA-174  
(COMPLIES WITH HAZARD COMMUNICATIONS STD. 29 CFR 1910.1200)

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION



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#### PRODUCT IDENTIFICATION

TRADE NAME: FLUXTROL® "A"  
USE: Shapes for subsequent fabrication used for magnetic flux control in electromagnetic applications

### SECTION 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

#### 2.2 GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

#### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS – none.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Composition: Iron Powder with Polytetrafluoroethylene Resin (PTFE)

Identification	Cas No.	Concentration	OSHA/PEL	TLV
Iron	7439-89-6	75-98	N/A	N/A
Polytetrafluoroethylene	9002-84-0	2-25	N/A	N/A

### SECTION 4. FIRST AID MEASURES

**4.1 INGESTION:** Unlikely – induce vomiting and contact a physician

**4.2 SKIN:** Flush with soap and water

**4.3 EYES:** Flush with plenty of water – contact a physician

**NOTE TO PHYSICIAN:** Inhaling fumes of thermally decomposing products can induce temporary influenza like symptoms which are described as "polymer fume fever"; these symptoms include fever, cough and malaise.

**CHRONIC EFFECTS:** NONE KNOWN

**MEDICAL CONDITIONS GENERALLY AGGRAVATED BY THIS MATERIAL:** NONE KNOWN

**MATERIAL SAFETY DATA SHEET****SECTION 5. FIRE AND EXPLOSION HAZARD DATA****5.1 UNUSUAL FIRE, EXPLOSION HAZARDS:**

Traces of hydrogen fluoride will evolve in fire. Strong heat, sparks or flame will initiate rapid oxidation, which in the presence of sufficient air will proceed to spontaneously glow red. May ignite other combustibles. Should inhalation occur during thermal decomposition, remove from exposure – provide fresh air, if coughing, wheezing or shortness of breath occur-contact a physician.

**5.2 HAZARDOUS COMBUSTION PRODUCTS: NONE KNOWN****5.3 SPECIAL FIRE FIGHTING INSTRUCTIONS:**

Fire fighters and others exposed to products of combustion should wear full protective clothing including self-contained breathing apparatus. Fire fighting equipment should be thoroughly decontaminated after use.

**5.4 EXTINGUISHING MEDIA: Carbon Dioxide**

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**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1 SPILLS OR RELEASE:** Clean up by sweeping to prevent falls.

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**SECTION 7: HANDLING AND STORAGE****7.1 Precautions for safe handling:**

Refer to section 8.

**7.2 Conditions for safe storage:**

Keep shapes in dry area to prevent oxidation.

**7.3 Specific end use(s):**

Apart from the uses mentioned in section 1 no other specific uses are stipulated.

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Exposure controls****Ventilation**

Local exhaust at processing equipment to keep particulates below 15 mg/m<sup>3</sup>, the OSHA limit for nuisance dusts. Grinding and machining of parts should be reviewed to assure that particles levels are kept at recommended levels.

**8.2 Personal protective equipment****Eye**

Safety glasses are recommended to prevent particulate matter from entering eyes while grinding or machining.

**Skin**

Protective gloves are recommended when handling FLUXTROL® to prevent hand oils from being deposited onto shapes.

**RESPIRATOR**

None under normal processing, if ventilation is adequate.

NOTE: Enforce no smoking policy in areas where material is machined. Wash hands after handling to avoid transfer of dust onto cigarettes and tobacco.

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**MATERIAL SAFETY DATA SHEET****SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

<b>Appearance</b>	Components may be in various shapes. Metallic color.
<b>Odor</b>	Essentially odorless.
<b>Melting point</b>	927°C / 1700°F
<b>Solubility in water</b>	Insoluble.
<b>Volatile content %</b>	<1%
<b>Specific gravity</b>	6.6 g/cc ± 2%

**9.2 Other safety information**

None available

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**SECTION 10. STABILITY AND REACTIVITY****10.1 Reactivity**

No data available.

**10.2 Chemical stability**

Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**

No data available

**10.4 Conditions to avoid**

No data available

**10.5 Incompatible materials**

Avoid strong acids and strong oxidizers.

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**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects****Chronic toxicity**

FLUXTROL® does not appear to possess any toxicological properties.

**Skin corrosion/irritation**

Possible irritation or dermatitis in some individuals upon prolonged contact. Repeated skin contact may cause drying of the skin, which may lead to dermatitis.

**Eye damage/eye irritation**

Iron in the eye causes rust rings in the cornea associated with irritation.

**Respiratory or skin sensitization**

No information available

**Carcinogenicity**

None known

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**MATERIAL SAFETY DATA SHEET****SECTION 12. ECOLOGICAL INFORMATION**

- 12.1 Aquatic toxicity**  
Toxicity is expected to be low based on insolubility of FLUXTROL® in water
- 12.2 Persistence and degradability**  
No information available
- 12.3 Bioaccumulative potential**  
No information available
- 12.4 Mobility in soil**  
No information available
- 12.5 Other adverse effects**  
No information available
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**SECTION 13. DISPOSAL CONSIDERATIONS**

- 13.1 Spill or release**  
Clean up by wet sweeping to minimize dust exposure.
- 13.2 Waste disposal**  
Landfill or incineration in compliance with federal, state and local regulations.
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**SECTION 14. TRANSPORT INFORMATION**

**DOT (US):**  
Not dangerous goods

**IMDG:**  
Not dangerous goods

**IATA:**  
Not dangerous goods

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**SECTION 15. REGULATORY INFORMATION**

**SARA 302 Components**  
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**  
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**  
No SARA Hazards

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## **MATERIAL SAFETY DATA SHEET**

### **SECTION 16. MISCELLANEOUS INFORMATION**

This information set forth herein has been gathered from standard reference materials and/or supplier test data and it to the best knowledge and behalf of Fluxtrol Manufacturing, Inc. are accurate and reliable. Such information is offered solely for your consideration, investigation and verification, and it is not suggested or guaranteed that the hazard precautions or procedures mentioned are the only ones, which exist. Fluxtrol Manufacturing, Inc. makes no warranties, expressed or implied, with respect to the use of such information or the use of the specific material identified herein combination with any other material or process, and assumes no responsibility therefore.

N/A= Not Applicable

**END OF MSDS**