

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: FERROTRON® 559H
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	80-98	N/A	N/A
Polytetrafluoroethylene	9002-84-0	2-20	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**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1 SPILLS OR RELEASE:** Clean up by sweeping to prevent falls.**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.

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

Local exhaust at processing equipment to keep particulates below 15 mg/m³, 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 FERROTRON® 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.

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

Appearance	Components may be in various shapes. Metallic color.
Odor	Essentially odorless.
Melting point	927°C / 1700°F
Solubility in water	Insoluble.
Volatile content %	<1%
Specific gravity	5.9 g/cc ± 2%

9.2 Other safety information

None available

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.

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

FERROTRON® 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

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

- 12.1 Aquatic toxicity**
Toxicity is expected to be low based on insolubility of FERROTRON® 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

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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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