

FERROFLUID®

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1. Product Identification

Synonyms: Ferromagnetic Fluid; EFH1

CAS No.: N/A

Molecular Weight: N/A

Chemical Formula: N/A

Product Codes: CHEM-593 and others

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Magnetite	1317-61-9	3-15	No
Oil-soluble Dispersant	N/A	6-30	No
Carrier Liquid	N/A	55-91	No

3. Hazards Identification

Emergency Overview

The precise composition of this mixture is proprietary information. A more complete disclosure will be provided to a physician or nurse in the event of a medical emergency. (800) 424-9300 (Domestic); (703) 527-3887 (For International)

SAF-T-DATA™ Ratings

Health Rating: 2 - Moderate

Flammability Rating: 1 - Slight

Reactivity Rating: 0 - None

Contact Rating: 2 - Moderate

Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES

Storage Color Code: Green (General Storage)

Threshold Limit Value: 5mg/m³ for oil mist in air (OSHA Regulations 29 CFR 1910-1000)

Effects of Overexposure: No experience with overexposure.

Prolonged or repeated contact with skin or eye contact may cause irritation. Inhalation of mist or vapor at high temperature may irritate respiratory passages.

4. First Aid Measures

Skin Contact: Wash with soap and water.

Eyes: Flush with water and consult a physician for treatment.

Inhalation of Smoke or Mist: Move to fresh air and refer to physician for treatment.

Ingestion: The material has minimal toxicity, but fluid aspirated into the lungs during ingestion could cause severe pulmonary injury.

Do not induce vomiting and should seek medical attention if the material is ingested.

5. Fire Fighting Measures

Flash Point (°F): 160°

Method: TCC

Flammable Limits: uel: 0.6

l_{el} : 7.0 at 77°F

Extinguishing Media: CO₂, Foam, dry chemical, water spray.

Special Fire Fighting Procedure: Avoid smoke inhalation. Water spray may cause frothing.

Unusual Fire and Explosion Hazard: None

6. Accidental Release Measures

Steps to be taken in case material is released or spilled: Remove free liquid. Add absorbent (sand, earth, sawdust) to spill area. After removing absorbent, wash surface with soap and water to reduce possible slipping hazard.

Waste Disposal Method: Consult federal, state and local regulations applicable to disposal of waste oils.

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

Ordinary care in handling chemicals. Wash hands after handling.

Other Precautions:

Avoid contamination of tobacco products. Users should be aware that a very small percentage of the population may display unexpected allergic skin reactions to otherwise innocuous industrial chemicals and raw material.

8. Exposure Controls/Personal Protection

Respiratory Protection (Specify Type): None required unless smoke, mists, or vapors are produced.

Ventilation: No special ventilation required.

Protective Gloves: If required to prevent prolonged or repeated skin contact.

Eye Protection: Safety glasses, if splash is possible.

Other Protective Equipment: Not needed.

9. Physical and Chemical Properties

Appearance:

Black liquid.

Odor:

Mild.

Solubility:

Negligible in water @ 20°C (68°F)

Specific Gravity:

0.92 to 1.47

pH:

N/A

% Volatiles by volume @ 21°C (70°F):

55-91

Boiling Point:

401-491°F

Melting Point:

N/A

Vapor Density (Air=1):

6.4

Vapor Pressure (mm Hg):

1 at 100°F

Evaporation Rate (BuAc=1):

<0.1

10. Stability and Reactivity

Stability: Unstable [] Conditions to Avoid: Prolysis

Stable [x]

Incompatibility (materials to avoid): Strong oxidizing materials, heat, and flame.

Hazardous Decomposition Products: Burning may produce carbon monoxide and nitrogen oxides.

Hazardous Polymerization: May Occur [] Will Not Occur [x]

11. Toxicological Information

This product DOES NOT contain any materials considered to be carcinogenic by any recognized sources.

This material is not sold for use in products for which prolonged contact with skin or implantation in the human body is intended. Ferrotec (USA) Corporation does not recommend this material as safe and effective for such uses and assumes no liability for any such use.

This product does not contain any chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR Part 372.

12. Ecological Information

Environmental Fate:

No information found.

Environmental Toxicity:

No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Although not a listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

U.S. DOT Bulk

Shipping Description: Not regulated

U.S. DOT Non-Bulk

Shipping Description: Not regulated

IMDG Code

Shipping Description: Not regulated

ICAO Shipping Description: Not regulated

ADR/RID Hazard Class: Not regulated

15. Regulatory Information

None

16. Other Information

Product Use:

Laboratory Reagent and Consumer Hobby

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