

Nano Demos



January, 2005

MATERIAL SAFETY DATA SHEET

SECTION I: PRODUCT IDENTIFICATION

MANUFACTURER'S NAME:	Ferrotec (USA) Corporation
ADDRESS:	40 Simon Street Nashua, N.H. 03061
TELEPHONE:	(603) 883-9800 (X212)
EMERGENCY ONLY TELEPHONE:	(800) 424-9300 (Domestic) (703) 527-3887 (For International)
CHEMICAL NAME:	Proprietary Product
TRADE NAME & SYNONYMS:	EFH1
CHEMICAL FAMILY:	Colloidal Dispersion
FORMULA:	Mixture

SECTION II: COMPONENTS

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.

Magnetite:	3-15 % by volume
Oil Soluble Dispersant:	6-30 % by volume
Carrier Liquid:	55-91 % by volume

SECTION III: CHEMICAL AND PHYSICAL PROPERTIES

Boiling Point (°F):	401-491
Specific Gravity:	0.92 to 1.47
Vapor Pressure (mm Hg.):	1 at 100°F
Percent Volatile by Volume:	55-91 %
Vapor Density (AIR = 1):	6.4
Solubility in Water:	Negligible
Evaporation Rate at:	<0.1
Appearance & Odor:	Black liquid, Mild odor

SECTION IV: FIRE AND EXPLOSION HAZARD AREA

Flash Point (°F): 160°

Method: TCC

Flammable Limits: uel: 0.6
lcl: 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

SECTION V: HEALTH HAZARD AREA

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.

Emergency and First Aid Procedures:

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.

SECTION VI: REACTIVITY DATA

Stability: Unstable Conditions to Avoid: Prolysis
Stable

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

SECTION VII: SPILL OR LEAK PROCEDURES

~~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.

SECTION VIII: SPECIAL PROTECTION INFORMATION

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.

SECTION IX SPECIAL PRECAUTIONS

Precautions to be taken in handling and storing:

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.

SECTION X: 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

SECTION XI: COMMENTS

- * 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.