

GELEST, INC.

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MATERIAL SAFETY
DATA SHEET

EMERGENCY TELEPHONE
CHEMTREC: 1-800-424-9300

NAME USED ON LABEL: **IRON (II,III) OXIDE MAGNETOFLUID - INFE044**
CHEMICAL NAME: IRON (II,III) OXIDE- 3.6% in water
SYNONYMS: FERROFLUID, COLLOIDAL MAGNETITE DISPERSION
CHEMICAL FAMILY: IRON COMPOUND in water
FORMULA: Fe₃O₄

HMIS CODES HEALTH: 1 FLAMMABILITY: 0 REACTIVITY: 0

INGREDIENTS

IDENTITY	CAS NO.	%	TLV	OSHA PEL
IRON (II,III) OXIDE	1309-38-2	3-4		not established
WATER	7732-18-5	>95		

PHYSICAL DATA

Boiling Point: 100°C-initial
Specific Gravity: 1.19
Vapor Density, air =1: NA
% volatiles: NA
Molecular Weight: 231.54
Appearance & Color: Brown-black liquid wild mild odor

Melting Point: <0°C
Vapor Pressure, 25°C: NA
Solubility in water: insoluble
Evaporation rate: NA
Other: NA

FIRE & EXPLOSION DATA

Flash Point, COC: not flammable Autoignition Temp.: not flammable
Flammability Limits- LEL: NA UEL: NA

Extinguishing Media: Water spray or fog, foam, carbon dioxide, dry chemical.
Special Fire Fighting Procedures: Avoid eye and skin contact. Do not breathe fumes or inhale vapors.

Unusual Fire and Explosion Hazards: Irritating fumes and organic acid vapors may develop when material is exposed to elevated temperatures or open flame.

-1-(INFE044)

ENVIRONMENTAL INFORMATION

Spill response: Sweep material and transfer to a suitable container for disposal.

Recommended Disposal: Incinerate or absorb slurry onto clay or other inert material and landfill in accordance with regulations.

HEALTH HAZARD DATA

Eye Contact: May cause immediate or delayed severe eye irritation.

Skin contact: May produce irritation or contact dermatitis. Prompt and thorough washing with soap and water will reduce or eliminate potential dermal effects.

Inhalation: Inhalation may irritate the respiratory tract.

Acute Toxicity: No toxicity data is available.

Chronic Toxicity: Not determined

SUGGESTED FIRST AID

EYES: In case of contact, immediately flush eyes with flowing water for at least 15 minutes. Get medical attention.

SKIN: Flush with water, then wash with soap and water.

INHALATION: Move exposed individual to fresh air. Administer oxygen if needed. Call a physician.

INGESTION: Never give fluids or induce vomiting if patient is unconscious or having convulsions. To conscious individual give one full cup of water to dilute ingested material. Get medical attention.

REACTIVITY DATA

Stability: Stable when stored in the in sealed containers.

Conditions to avoid: No incompatibilities other than those associated with water.

Hazardous decomposition products: Carbon monoxide, organic acid vapors, iron oxide.

SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is recommended. Mechanical is recommended.

Respiratory Protection: If exposure exceeds TLV, NIOSH approved organic vapor respirator.

Eye and Face Protection: Chemical worker's goggles. Do not wear contact lenses.

Other Clothing and Equipment: Rubber, neoprene or nitrile gloves. An eyewash and emergency shower should be available. Launder clothing before reuse.

OTHER PRECAUTIONS

For research and industrial use only.

Storage and Handling: Store in sealed containers.

TRANSPORTATION

DOT SHIPPING NAME: None required

DOT HAZARD CLASS: None required

DOT LABEL: None required

DOT ID No: None required

Prepared by safety and environmental affairs ISSUE DATE INFE044: 12/16/02
SUPERSEDES: none

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