

SAFETY DATA SHEET

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Anilox Research Technologies Sàrl

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1. Product identification

Product trade name : Anicheck ferrofluid Chemical name : Proprietary product

Chemical formula: Mixture

Chemical family: Colloidal dispersion

Relevant uses of the substance: Measurement of magnetic fields

Manufacturer: Ferrotec (USA) Corporation, 33 Constitution

Drive, Bedford NH 03110, USA. Phone: +1 603 472-6444

Emergency telephone: +1 703 527-3887

2. Hazard identification

Skin Corrosion / Irritation : Category 2
Severe Eye Damage / Irritation : Category 2

Target Organs: Not Established

Aspiration Toxicant : Category 1

GHS label Elements, including precautionary statements:

Pictogram:





Signal word: Warning

Hazard statements: H315 Cause skin irritation

H319 Cause serious eye irritation H400 Very toxic to aquatic life

H4100 Very toxic tp aquatic life with long lasting

effects

Prevention: P264 Wash thoroughly after handling

P273 Avoid release to the environment

P280 Wear protective gloves / protective clothing / eye protection / face protection

Response: P302+P352: If on skin: Wash with plenty of

soap and water

P305+P351+P338 : If in eyes : Rinse cautiously with water for several minutes. Remove contact lenses, if possible and easy to do. Continue

rinsing.

P332+P313: If skin irritation occurs: Get

medical advice / attention

P337+P313 : If eye irritation persists : Get

medical advice / attention

P362: Take off contaminated clothing and wash

before reuse

P391: Collect spillage

P501: Dispose of contents and container in accordance with local regulations. Contains: distillates (petroleum), hydrotreated light

Any hazards not otherwise classified or identified during classification process : GHS Class 4 Combustible

% of mixture of ingredient(s) of unknown toxicity: N/A

HMIS Classification: Health hazard: 1

Chronic halth hazard: N/A

Flammability: 2 Physical hazards: 0

NPFA rating: Health hazard: 1

Fire: 2

Reactivity hazard: 0

Potential Health Effects: Inhalation: Inhalation of oil mists or vapors at

elevated temperatures may cause respiratory

irritation

Skin: Potential skin irritant **Eyes**: Potential eye irritant

Ingestion: No significant health hazard

3. Composition / Ingredient information

The particles in the colloid cause persistent stains on textiles, on the skin, etc. The particles are very small and get into pores. Stains on the skin are harmless, but may derogate in the eye.

The precise composition of this mixture is proprietary information.

A more complete disclosure will be provided to a physician or a nurse in the event of a medical emergency. All components are registered in Chemical Abstracts Service (CAS).

| Composition | | Proportion % (by volume) | Exposure Limit | Toxicity Data | |
|-------------|---|--------------------------|----------------|---------------|--|
| Α | Magnetite (Fe ₃ O ₄) | 3 - 15 | No Data | No Data | |
| В | Oil Soluble Dispersant | 6 - 30 | No Data | No Data | |
| С | Light Hydrocarbon Oil | 55 - 91 | No Data | No Data | |

4. First aid measures

Threshold Limit Value: 5 mg/m³ for oil mist in air (OSHA Regulations 29

CFR 1910-1000)

No experience with overexposure. Prolonged or Effects of Overexposure:

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

passages.

Contact with skin: Wash with soap and water

Check for contact lenses and remove. Flush with Contact with eye:

water and consult a physician

Inhalation: Move to fresh air and consult a physician

Ingestion: This material has minimal toxicity, but fluid

aspirated into lungs during ingestion could cause severe pulmonary injury. Always consult a

physician

Most important symptoms

/ effets :

Acute: Not established

Delayed: Not established

Indication of immediate medical

attention and special treatment

needed, if necessary:

This product should not cause any significant health issues. Take appropriate action for signs

of allergic or sensitivity reaction

This product contains fatty acid dispersant and Notes to physicians:

light paraffinic hydrocarbon oil. If breathing has

stopped, try artificial respiration.

5. Fire fighting measures

71° Flash point (°C):

Method: **TCC** Flammable limits: uel: 0.6, lel: 7.0 at 25°C

Suitable extinguishing media: CO₂, foams, powders, water

Unsuitable extinguishing media: N/A

Specific hazards arising from chemical combustion products: Burning may produce carbon monoxide and nitrogen oxides. Vapor mixed with air at temperatures above flash point may be explosive. Vapor is heavier than air.

Special fire fighting procedure: Avoid smoke inhalation. Water spray may cause

frothing.

Special protective equipment

and precautions for fire fighters:

Respirators, if smoke or vapor is present

Unusual fire and explosion

hazard:

None

6. Accidental release measures

Steps to be taken in case material is released or spilled:

Avoid extensive contact with skin, if necessary use protective gloves.

Remove free liquid with absorber material (sand, sawdust) and wash the surface with soap and water.

Waste disposal method:

Dispose waste water over an oil separator.

Consult federal, state and local regulations applicable to disposal of waste oils.

7. Handling and storage

Avoid prolonged or repeated skin contact. Handling:

Use protective gloves if necessary.

Ordinary care in handling chemicals. Wash hands

after handling.

Storage: Store the container in an upright position, keep closed.

Other precautions: Avoid contamination of food or 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 materials.

8. **Exposure controls / Personal protection**

Permissible exposure limit

(PEL):

Not established

Threshold limit value

(TLV):

Not established

Any other exposure limit: No data

Appropriate engineering

controls:

Supply adequate ventilation

Personal protective measures / equipment :

Respiratory protection: not required unless smoke,

mists or vapors are produced.

Ventilation: no special ventilation required

Hand protection: rubber or plastic gloves to prevent

prolonged or repeated contact with skin

Eye protection : safety glasses recommended if

splash is possible

Other protective equipment: Apron recommended but

not required

9. Physical and chemical properties

Appearance: Black liquid, mild odor

Boiling point: >204..255°C

Flash point : >71°C, method: TCC

Solubility in water : negligible

Evaporation rate : <0.1 (n-Butyl Acetat = 1)

Lower/upper explosion

limits:

Not established

Vapor pressure: 0.1 kPa @ 20°C

Vapor density (air=1): 6.4

pH: N/A

Melting/freezing point : Not established

Partition coefficient : n-octanol/water : no data

Auto-ignition temperature: 215 °C

Odor threshold : Not established

Density: $1.21 - 1.42 \text{ g/cm}^3$

Flammability (solid/gas): No data

Water solubility: Insoluble

Viscosity: 6-12 cP

Decomposition temp.: No data

10. Stability and reactivity

Reactivity: No data

Chemical stability: Stable under recommended storage conditions

Hazardous decomposition

products:

Burning may produce carbon monoxide and nitrogen

oxides

Hazardous polymerization: Will not occur

Conditions to avoid: Will evaporate if left in open air. Avoid flame, spark

and other ignition sources. Keep away from sewers

and bodies of water.

Incompatible materials: Strong oxidizing agents

11. Toxicological properties

Threshold limit value for oil mist in air: 5 mg/m3 (OSHA, 29 CFR 910-1000).

Acute toxicity: Oral LD50 : no data

Inhalation LC50 : no data Dermal LD50 : no data

Potential health effects: Inhalation: slight irritation

Ingestion: may cause death if aspirated during

swallowing

Skin: slight irritation Eyes: slight irritation

Signs and symptoms of

exposure:

Symptoms, if present, vary with individual. Watch for signs of allergic reaction, rash or respiratory distress.

Synergistic effects: No data

Additional information: N/A

12. Ecological information

Ecotoxicity: Variable data

Persistence and Possibility of bio-concentration because of non-

biodegrability: resolvability

Bioaccumulative potential: Non resolvability: high possibility of bioaccumulation

due to hard resolvability

Mobility in soil : Possibility of adsorption into soil

Other adverse effects: No data

13. Disposal consideration

Product: Comply with all European, state and local regulations for disposal of waste oils. High temperature incineration.

Do not dump this product into sewers, on the ground or into any body of water. Contaminated packaging: dispose of as unused product, high temperature incineration.

14. Transport information

DOT Hazard class : Combustible liquid

(US) UN No : N/A

Packing group: III

Proper bulk shipping description: Hydrocarbons, Liquid, N.O.S.

Proper non-bulk shipping description: Not restricted

Reportable quantity: None

Marine pollutant : No reference

Poison inhalation hazard: N/A

IMDG Hazard class : Combustible liquid

UN No: N/A

Packing group: III

Proper bulk shipping description: Not restricted

Proper non-bulk shipping description: Not restricted

ICAO shipping description : Not restricted

ADR/RID hazard class: Not restricted

IATA Hazard class: GHS Class 4 Combustible

UN No: N/A

Packing group: III

Proper bulk shipping description: Not restricted

Proper non-bulk shipping description: Not restricted

ICAO Not regulated

15. Regulations

OSHA Hazards: N/A

DSL Status: N/A

SARA 302 Components: N/A

SARA 313 Components: N/A

| Composition | | CAS No. | TSCA | EINECS | OSHA |
|-------------|---|-------------|------------|------------|------------|
| Α | Magnetite (Fe ₃ O ₄) | 1309-38-2 | Registered | Registered | Registered |
| В | Oil Soluble Dispersant | Proprietary | Registered | Registered | Registered |
| С | Light Hydrocarbon Oil | Proprietary | Registered | Registered | Registered |

These components do not contain any chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act (SARA) of 1986 and 40 CFR part 372.

16. Other information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH).

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

We believe the statements, technical information and recommendations contained herein to be reliable, but they are given without warranty or guarantees of any kind, and we assume no responsibility for any loss, damage or expense, direct or consequential, arising from their use.

RoHS compliance statement : This material is believed to comply with RoHS standards.

REACH 2 compliance statement: This material is believed to comply with REACH standards.

PM = Method for determination of the flash point according to Persky-Martens. The flash point is a temperature limit above which vapors in flammable concentration escape.

OSHA = Occupational Safety & Health Administration (in the US)

All components are listed in European Lists and are allowed to be imported to the EU. All data are based on best todays knowledge. They should specify the product in terms of security, and are not meant to be application related attributes, and therefore are not contracting. For not classified products this is on voluntarily basis.