

## **Inspection Data Sheet Ferro fluid midrange - Good Hifi VOF, date 20-04-2023**

Product name : Magnetic Fluid

Model No. : SPL9(A)

Standard : 300Gauss/2000cP

Specifications:

Viscosity (27°C): cP (mPa.sec) 2000 ±10%, Measured: 2110

Magnetization (VCM) Gauss 300±10%, Measured: 312

## **Material Safety Data Sheet Issue date: January 01, 2016**

### 1. Product and Company identification

Product name & Model No. : Magnetic Fluid /SPL9(A)

Information of the manufacturer

Company name: MAGRON CO., LTD.

Address: #506 B.I Center, Hanyang University, 55(Sa-dong), Hanyangdaehak-ro, Sangnok-gu, Ansan-si, Gyeonggi-do, KOREA

### 2. Hazards Identification

Adverse human health effects:

May irritate the eyes, respiratory organs and skin.

Physical and Chemical hazards: Flammable, keep away from fire

Specific Hazards: No data

GHS category: NA

Handling: Prevent inhalation of vapor

Precautions: Use protection gloves, goggles and face shield. Please read safety datasheet carefully before use.

### Accidental release measures

Inhalation: Move to an area of clean air area and rest in a comfortable position.

Skin contact: Wash with plenty of soap and water.

Eye contact: Wash carefully with water for at least 15 minutes.

Swallow: Wash mouth out with water and drink some water or milk.

Seek doctor advice in the following cases: Eye contact, swallow, skin irritation, nausea and other physical symptoms, or suspected exposure to the chemical.

### 3. Composition/Information of ingredients

Substance or Mixture: Mixture

Chemical name: Hydrocarbon Magnetite, Iron oxide

CAS number 64742-53-6 1309-38-2

Concentration: 60~80 20~40

Chemical structure: C4H9 Fe3O4

### 4. First Aid Measures

Inhalation: Move victim to an area of fresh and rest. Seek doctor advice if necessary.

Skin Contact: Wash the area with water and soap.

Eye Contact: Wash with plenty of clean water and seek doctor's advice.

Ingestion: Rinse mouth out with water and give a glass of water or milk to drink, and then seek doctor's advice. If the victim is unconscious, do not give them anything to drink.

### 5. Fire Fighting Measures

Extinguishing media: Powder, Foams, Carbon dioxide. Do not spray with water.

Method of extinguisher: Move container from fire if safe to do so and use extinguishing media. Stay

upwind as much as possible and use appropriate protection (gloves, goggles, gas mask etc)

#### 6. Accidental release measures

Precautions for chemical contact, protection and first aid:

Use protection for inhalation and use other protection if necessary.

Environmental precaution: Avoid discharge of free liquid in sewage systems and undergrounds waterways. Avoid the discharge of the released product to the water catchment area.

Method of clean up:

Small quantity: Absorb the released liquid with rags, sand or sawdust and then wipe well with rags.

#### 7. Handling ,Storage and Airfreight

Handling: Handle outside or provide working area with adequate ventilation systems.

Use gloves / goggles / gas mask

Keep away from fire.

Wash hands and face well and gargle after handling.

Storage: Shield the container and store cool, good ventilation area.

Avoid direct sun and rain.

Keep away from fire

Airfreight

Magnetic Flux Density is less than 0.00525GAUSS be a way from 4.6Meters. Therefore it doesn't need extra packaging

#### 8. Physical and Chemical properties

Physical state, color: Liquid, black

Odor: Slightly characteristic odor

Flashing point: over 240 degrees Celsius (COC)

Auto Ignition point: 285 degrees

Exclusivity range: No data

Specific gravity at 27 degrees Celsius: 1.04~1.5

Solubility: Water - Insoluble, Ethanol – Partially soluble

#### 9. Stability and Reactivity

Stability: Stable under normal conditions

Reactivity: Non-reactive

Possibility of hazardous reaction: No data

#### 10. Toxicological information:

Acute toxicity: No data

#### 11. Ecological information

Not available data

#### 12. Disposal consideration.

Waste treatment: Incinerate according to the regulations/law

Entrust local government approved waste disposal companies with disposal.

Contaminated containers: dispose with approved waste disposal companies after thoroughly removing contents.

#### 13. Transport information

UN class: NA

Safety measure while transport: As categorized under the Fire Service Act /Hazardous Materials 4-4

petroleum liquid, follow the regulation. Use robust and stable containers, seal for transport Make sure containers are not leaking and secure load to prevent shifting. Avoid exposure to direct sunlight.

#### 14. Regulatory information

Fire Service ACT: Hazardous 4-4 petroleum, Class

Poisonous and Deleterious Substances Control Act: Not classified

IMO/ICAO: Not classified

IATA: Not classified

#### 15. Others

The information contained herein is based in several references and represents the present state of our knowledge, however, the MSDS does not always cover all information about the product, so handle the product carefully.

The information applies to ordinary small scale usage with loudspeakers, in the case of special requirements, take appropriate safety precautions.

The information herein is only provisional and it does not represent a guarantee for the properties of the product.