

# SAFETY DATA SHEET

## 1. Product and Company Identification

Product Name: **NEO MAGNALITE FY-500C—concentrated fluorescent magnetic particle liquid**

Company Name: Denshijiki Industry Co., Ltd.

Address: 5-6-20 Ukima, Kita-Ku, Tokyo

Section in Charge: Development department

Telephone: +81-3-5970-8681      FAX: +81-3-5970-8680

Emergency Telephone: Same as the section in charge

Date of Creation: April 22, 2014      Date of Revision: January 21, 2021

Reference Number: SDS15120-07e

Product Code: 15120

Recommended Uses and Restrictions on Use: Magnetic particle testing (water-based method)

## 2. Hazards Identification

### GHS Classification

Physical Hazards	Flammable solid	Not classified
Health Hazards	Acute toxicity (oral)	Not classified
	Acute toxicity (dermal)	Classification not possible
	Acute toxicity (inhalation)	Classification not possible
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 1
	Germ cell mutagenicity	Classification not possible
	Carcinogenicity	Classification not possible
	Reproductive toxicity	Classification not possible
	Specific target organ toxicity (single exposure)	Category 1 (liver) Category 3 (narcotic effects)
	Specific target organ toxicity (repeated exposure)	Category 2 (liver, kidney, blood, and central nervous system)
Environmental Hazards	Aspiration hazard	Classification not possible
	Hazardous to the aquatic environment (acute)	Category 2
	Hazardous to the aquatic environment (chronic)	Classification not possible
	Hazardous to the ozone layer	Classification not possible

### GHS Label Elements



Pictograms:

Signal Word: Danger

Hazard Statement: Causes skin irritation  
Causes serious eye damage  
Causes damage to organs (liver)  
May cause drowsiness or dizziness

May cause damage to organs through prolonged or repeated exposure (liver, kidney, blood, and central nervous system)

Toxic to aquatic life

Precautionary Statement:

Prevention	Do not breathe dusts or mists. Wash hands thoroughly after handling. Do not eat or drink when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/eye protection/protective clothing.
Response	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of water and soap. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention. If exposed or concerned, Call a POISON CENTER/doctor. Call a POISON CENTER/doctor, if you feel unwell. Get medical advice/attention.
Storage	Store in a cool, well-ventilated place, away from direct sunlight. Keep container tightly closed. Store locked up.
Disposal	Dispose of contents/container at an approved waste disposal plant in accordance with local/regional/national regulations.

### 3. Composition/Information on Ingredients

Substance/Mixture: Mixture

Chemical Name or Common Name	Content (%)	CAS No.
Iron oxide	5-10	1309-38-2
Fluorescent pigment	1-10	Registered
Synthetic resin	1-5	Registered
Surfactant A	10-20	Registered
Surfactant B	1-5	Registered
Rust inhibitor	1-5	Registered
Neutral antifoam (silicone)	1-5	Registered
Diethanolamine	5-10	111-42-2
Water	50-65	-

### 4. First Aid Measures

IF INHALED	:	Remove person to fresh air and keep comfortable for breathing. Cover with a blanket, keep warm and at rest, and get medical attention as needed.
IF ON SKIN	:	Wash with plenty of water and soap. If skin irritation occurs, get medical advice/attention.
IF IN EYES	:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Rinse for at least 15 minutes, and then get medical attention.

IF SWALLOWED	:	Do NOT induce vomiting. Get medical attention. If the product remains in the mouth, rinse thoroughly.
Most Important Signs and Symptoms, Acute and Delayed	:	Narcotic effects, sedative effects, ataxia, liver damage, and anemia

## 5. Firefighting Measures

Extinguishing Media	:	Minor fire: dry chemical, carbon dioxide, foam, and dry sand Major fire: water sprinkling, water spray, and alcohol resistant foam fire extinguishing agent
Inappropriate Extinguishing Media	:	Straight stream of water
Specific Hazards	:	In case of fire, this product may generate toxic gases and cause oxygen deficiency.
Special Firefighting Procedures	:	This product is non-flammable, but if it is exposed to fire, extinguish the fire with plenty of water. If a fire breaks out in the surrounding area, remove containers to a safe place. Perform fire-fighting from the windward side, and wear respiratory protection if needed. Remove containers from the fire area, if it can be done safely. To prevent the fire from spreading, remove nearby flammable materials if safe to do so.
Protection of Firefighters	:	Perform fire-fighting from the windward side, and be sure to wear protective equipment. If burned or exposed to high temperature, this product may generate toxic gases (such as carbon monoxide). So wear respiratory protection.

## 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures	:	When dealing with the released material, wear appropriate protective equipment (refer to Section 8. Exposure Controls/Personal Protection) to avoid contact with eyes and skin or inhalation. Keep unnecessary personnel away. Deal with the released material from the windward side.
Environmental Precautions	:	Avoid release to the environment. Be careful not to discharge into rivers or anywhere else that would affect the environment.
Method and Materials for Containment and Cleaning Up	:	Absorb or cover the released material with dry earth or sand or another non-flammable material and collect in empty sealable containers for later disposal. Stop the leak if safe to do so.
Measures to Prevent Secondary Accidents	:	Prevent the released material from entering drain ditches, sewers, basements, or closed areas.

## 7. Handling and Storage

### Handling

Technical Measures	:	Take engineering measures and use protective equipment as described in Section 8. Exposure Controls/Personal Protection. Provide local and general ventilation as described in Section 8. Exposure Controls/Personal Protection.
Precautions for Safe Handling	:	Do not get in eyes. Do not inhale mists, vapors, or sprays. Avoid contact, inhalation, or ingestion. Do not eat, drink, or smoke when using this product. Wash hands thoroughly after handling.

## Storage

- Proper Storage Conditions : Prevent leakage. Store in an indoor, cool, dark, and well-ventilated place. Protect from direct sunlight and keep away from high-temperature substances. Keep tightly sealed and avoid contact with air. Do not store this product and flammable substances in the same place. Store under regulations and conditions based on related laws and regulations. Be careful not to allow this product to run off, spread, and contaminate the surrounding area. Store locked up if necessary.
- Safe Packaging Materials : Keep in containers specified in the product specifications.

**8. Exposure Controls/Personal Protection**

- Control Levels : 3.0 mg/m<sup>3</sup> (dust), surfactant B: 200 ppm
- Permissible Exposure Levels
- Japan Society for Occupational Health : Iron oxide: respirable dust: 1 mg/m<sup>3</sup>, total dust: 4 mg/m<sup>3</sup>, surfactant B: 260 mg/m<sup>3</sup>
- ACGIH : Iron oxide: Fe 5 mg/m<sup>3</sup>, surfactant B: 200 ppm, diethanolamine: 2 mg/m<sup>3</sup> (TWA)
- Engineering Measures : In an indoor, inadequately ventilated workplace, provide equipment to seal sources of generation or local or general ventilation equipment.
- Protective Equipment : Wear the following protective equipment as needed:
- Respiratory System Protection : Appropriate breathing apparatus, etc.
- Hand Protection : Appropriate protective gloves (rubber gloves, etc.)
- Eye Protection : Wear appropriate protective glasses.
- Skin and Body Protection : Wear boots, an apron, and appropriate protective clothing.

**9. Physical and Chemical Properties**

- Physical state : Viscous liquid
- Color : Yellow green
- Odor : Slight odor
- Melting point/ freezing point : No data available
- Boiling point or initial boiling point and boiling range : No data available
- Flammability : Non-combustible
- Lower and upper explosion limit / flammability limit : No data available
- Flash point : No data available
- Auto-ignition temperature : No data available
- Decomposition temperature : No data available
- pH : No data available
- Kinematic viscosity : 22000mm<sup>2</sup>/s (20°C)
- Solubility : Soluble in water.
- Partition coefficient n-octanol/water (log value) : No data available

Vapor pressure	:	No data available
Density and/or relative density	:	1.135 (20°C)
Relative vapor density	:	No data available
Particle characteristics	:	11µm (4-27µm)

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## 10. Stability and Reactivity

Chemical Reactivity and Stability	:	The product is stable under normal handling and storage conditions.
Possibility of Hazardous Reactions	:	-
Conditions to Avoid	:	-
Incompatible Materials	:	-
Hazardous Decomposition Products	:	-

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## 11. Toxicological Information

Acute Toxicity (oral)	:	LD <sub>50</sub> ≥ 5,600 mg/kg (rat): surfactant B LD <sub>50</sub> ≥ 1,900 mg/kg (rat): surfactant B LD <sub>50</sub> ≥ 7,300 mg/kg (mouse): surfactant B LD <sub>50</sub> ≥ 2,643 mg/kg (mouse): surfactant B LD <sub>50</sub> ≥ 1,613 mg/kg (rat): diethanolamine
Acute Toxicity (dermal)	:	No data available.
Acute Toxicity (inhalation)	:	No data available.
Skin corrosion and Skin irritation	:	No data available.
Serious Eye Damage or Eye Irritation	:	No data available.
Respiratory sensitization or Skin Sensitization	:	No data available.
Germ Cell Mutagenicity	:	No data available.
Carcinogenicity	:	No data available.
Reproductive Toxicity	:	No data available.
Specific Target Organ Toxicity, Single Exposure	:	No data available.
Specific Target Organ Toxicity, Repeated Exposure	:	No data available.
Aspiration Hazard	:	No data available.

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## 12. Ecological Information

Ecotoxicity	:	LC <sub>50</sub> = 68 mg/L (himedaka (gold-colored breed of Japanese rice fish)): surfactant B EC <sub>50</sub> = 19 mg/L (daphnia magna): surfactant B IC <sub>50</sub> = 260 mg/L (alga): surfactant B LC <sub>50</sub> = 2,150 µg/L (water flea): diethanolamine
Persistency/Degradability	:	No data available.

Bioaccumulative Potential	:	No data available.
Mobility in Soil	:	No data available.
Hazardous to the Ozone Layer	:	No data available.

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**13. Disposal Considerations**

Have contents/container disposed of by an industrial waste disposal contractor licensed by the prefectural governor.

Dispose of or have waste generated from effluent treatment or incineration disposed of by a waste disposal contractor in accordance with the Waste Management and Public Cleansing Act and other related laws.

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**14. Transport information**

UN Hazard Class : Not restricted

UN No. : Not restricted

Not regulated for transport of dangerous goods (IATA, IMDG)

Follow other related laws and regulations.

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**15. Regulatory Information**

All chemical substances in this product are included on or exempted from listing on the TSCA Inventory.

Comply with the applicable laws and regulations regarding this product in each country/region.

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**16. Other Information**

This Safety Data Sheet was prepared in accordance with JIS Z 7253:2019 to provide users of this product with reference information to ensure safe handling. Users are responsible for taking appropriate measures for individual handling conditions with reference to this SDS.

This SDS does not represent any guarantee of safety.

Major references

Safety Data Sheets (SDS) provided by raw material manufacturers

Japanese Standards Association (JIS) JIS Z 7253:2019 "Hazard communication of chemicals based on GHS"

NITE Chemical Risk Information Platform (CHRIP)

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