

SAFETY DATA SHEET

1. Chemical Product and Company Identification

Product Name: **MAGNALITE FY-6600 – Fluorescent Magnetic Powder –**
 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
 Issue Date: January 24, 2018 Revision Date: April 1, 2023
 Reference Number: SDS15143-23
 Product Code: 15143
 Recommended Uses and Restrictions on Use: Magnetic particle testing

2. Hazards Identification

GHS Classification

| | | |
|-----------------------|--|-----------------------------|
| Physical Hazards | Self-reactive Substances and Mixtures | Classification not possible |
| | Oxidizing Solids | Classification not possible |
| | Organic Peroxides | Classification not possible |
| | Corrosive to Metals | Classification not possible |
| Health Hazards | Acute Toxicity (Oral) | Classification not possible |
| | Acute Toxicity (Dermal) | Classification not possible |
| | Acute Toxicity (Inhalation: dust) | Classification not possible |
| | Skin Corrosion/Irritation | Classification not possible |
| | Serious Eye Damage/Eye Irritation | Category 2 |
| | Respiratory Sensitization | Category 1 |
| | Skin Sensitization | Category 1 |
| | Germ Cell Mutagenicity | Classification not possible |
| | Carcinogenicity | Classification not possible |
| | Reproductive Toxicity | Classification not possible |
| | Reproductive Toxicity/Effects on or via Lactation | Classification not possible |
| | Specific Target Organ Toxicity (Single Exposure) | Category 1 (Respiratory) |
| | Specific Target Organ Toxicity (Repeated Exposure) | Category 1 (Respiratory) |
| Aspiration Hazard | Classification not possible | |
| Environmental Hazards | Hazardous to the Aquatic Environment—Short-term (Acute) | Classification not possible |
| | Hazardous to the Aquatic Environment—Long-term (Chronic) | Classification not possible |
| | Hazardous to the Ozone Layer | Classification not possible |

GHS Label Elements



Pictogram:

Signal Word: Danger

Hazard Statements: May cause an allergic skin reaction
 Causes serious eye irritation
 May cause allergy or asthma symptoms or breathing difficulties if inhaled
 Causes damage to the respiratory system
 Causes damage to the respiratory system through prolonged or repeated exposure

Precautionary Statements:

Prevention Do not breathe dust.
 Wear protective gloves/eye protection.
 In case of inadequate ventilation, wear respiratory protection.

Response IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 If exposed or concerned, call a doctor.
 If experiencing respiratory symptoms, call a doctor.
 Take off contaminated clothing. And wash it before reuse.

Storage Store locked up.

Disposal Have the contents/container disposed of by a waste disposal contractor licensed by the national government or the prefectural governor.

3. Composition/Information on Ingredients

Classification of Substance or Mixture: Mixture

| Chemical Name or Common Name | Content (%) | CAS No. | Reference Number in Gazetted List (Chemical Substances Control Act/Industrial Safety and Health Act) |
|------------------------------|-------------|--------------|--|
| Iron oxide | 50 | 1317-61-9 | 1-357 |
| Sodium bicarbonate | 20 | 144-55-8 | 1-164 |
| Fluorescent pigment | 7.1 | Trade secret | Trade secret |
| Iron | 7.1 | 7439-89-6 | — |
| Melamine resin | 14 | 9003-08-1 | 7-559 |
| Polyoxyethylene decyl ether | 1.9 | 26183-52-8 | 7-97 |

4. First-aid Measures

IF INHALED : Remove person to fresh air and keep comfortable for breathing.
 Call a doctor if you feel unwell.

IF ON SKIN : Wash with plenty of soap and water. If skin irritation or rash occurs, get medical advice/attention.

IF IN EYES : Rinse cautiously with clean 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 : If the inside of the mouth is contaminated, wash thoroughly with water. Do NOT induce vomiting.

5. Fire-fighting Measures

- Extinguishing Media : Powder, foam, etc.
- Inappropriate Extinguishing Media : Straight stream of water
- Specific Hazards : When fighting fire, avoid breathing fumes as the combustion gases include carbon monoxide and other toxic gases.
- Specific Extinguishing Methods : Perform fire-fighting from the windward side, and wear respiratory protection if needed. Remove containers from the fire area if safe to do so. To prevent the fire from spreading, remove nearby flammable materials if safe to do so.
- Protection of Fire-fighters : 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 of dust.
- Environmental Precautions : Be careful not to discharge into rivers or other bodies of water so as not to affect the environment.
- Methods and Materials for Containment and Cleaning Up : Sweep up the scattered material and put it in a sealable container.

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 breathe dust.
Do not touch or swallow.
Wash hands thoroughly after handling.

Storage

- Storage Conditions : Store in a cool, well-ventilated place, away from direct sunlight. Keep containers tightly closed. Protect from moisture. Store at temperatures not exceeding 40°C. Store locked up if necessary.
- Packaging Materials : Keep in containers specified in the product specifications.

8. Exposure Controls/Personal Protection

- Control Levels : 3.0 mg/m³ (dust)
- Permissible Exposure Levels
- Japan Society for : Respirable dust (as iron oxide): 1 mg/m³, Total dust: 4 mg/m³

Occupational Health
(2016 ed.)

| | | |
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| Engineering Measures | : | In an indoor, inadequately ventilated workplace, provide local or general ventilation equipment. Provide an eyewash station. |
| Protective Equipment | : | Wear the following protective equipment as needed: |
| Respiratory Protection | : | Dust mask, etc. |
| Hand Protection | : | Appropriate protective gloves (made of PE, rubber, etc.) |
| Eye Protection | : | Appropriate protective glasses (goggles) |
| Skin and Body Protection | : | Appropriate protective clothing (protective clothing or long-sleeved work clothes) |

9. Physical and Chemical Properties

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|--|---|----------------------------|
| Physical State | : | Powder |
| Color | : | 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 |
| Upper/Lower Flammability or Explosive Limits | : | 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 | : | No data available |
| Solubility | : | Slightly soluble in water. |
| n-Octanol/Water Partition Coefficient (Log Value) | : | No data available |
| Vapor Pressure | : | No data available |
| Density or Relative Density | : | No data available |
| Relative Gas Density | : | No data available |
| Particle Characteristics | : | 10 µm (5–16 µm) |

10. Stability and Reactivity

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| Chemical Reactivity and Stability | : | Stable when stored at room temperature in a dark place. It solidifies slightly when it absorbs moisture. |
| Possibility of Hazardous Reactions | : | No data available |
| Conditions to Avoid | : | Heat and moisture |
| Incompatible Materials | : | No data available |
| Hazardous Decomposition Products | : | Toxic gases such as carbon monoxide may be generated by combustion, etc. |

11. Toxicological Information

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|--|--|
| Acute Toxicity (Oral) | : LD ₅₀ = 4,220 mg/kg (rat): Sodium bicarbonate |
| Acute Toxicity (Dermal) | : LD ₅₀ = 2,000 mg/kg (rat): Sodium bicarbonate |
| Acute Toxicity (Inhalation) | : LC ₅₀ = 5.33 mg/L/4h (rat): Sodium bicarbonate |
| Skin Corrosion/Irritation | : No data available |
| Serious Eye Damage/Eye Irritation | : Classified as Category 2 because the total content of the ingredient classified as Category 1 (polyoxyethylene decyl ether) multiplied by 10 is 19.0%, which is higher than the concentration limit (10%). |
| Respiratory or Skin Sensitization | : Respiratory Sensitization: Classified as Category 1 because the content of the ingredient categorized as Category 1 (melamine resin) is higher than 1%. Skin Sensitization: Classified as Category 1 because the content of the ingredient classified as Category 1 (melamine resin) is higher than 1%. |
| Germ Cell Mutagenicity | : No data available |
| Carcinogenicity | : No data available |
| Reproductive Toxicity | : No data available |
| Specific Target Organ Toxicity (Single Exposure) | : Classified as Category 1 (respiratory system) because the content of the ingredient classified as Category 1 (iron oxide) is higher than 10%. |
| Specific Target Organ Toxicity (Repeated Exposure) | : Classified as Category 1 (respiratory system) because the content of the ingredient classified as Category 1 (iron oxide) is higher than 10%. |
| Aspiration Hazard | : No data available |

12. Ecological Information

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|------------------------------|---|
| Ecotoxicity | : LC ₅₀ = 7,700 mg/L/96h (rainbow trout): Sodium bicarbonate |
| Persistence/Degradability | : No data available |
| Bioaccumulative Potential | : No data available |
| Mobility in Soil | : No data available |
| Hazardous to the Ozone Layer | : No data available |

13. Disposal Considerations

- Have the contents/container disposed of by an industrial waste disposal contractor licensed by the prefectural governor.
 - Dumping is prohibited.
 - If this product is to be disposed of by landfill, incinerate it in advance by using an incineration system, and ensure that the burned residue does not exceed the criteria specified in the Cabinet Order for Enforcement of the Act on Waste Management and Public Cleansing.
 - If this product is to be burned, burn it in a safe place using a method that does not cause harm or damage to other people or objects due to burning or explosion, and have someone stand guard.
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14. Transport Information

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|-------------------|-------|
| UN Classification | : N/A |
|-------------------|-------|

UN No. : N/A

Transport this product using containers and loading methods as specified by the following law:

Fire Service Act : N/A

Follow other related laws and regulations.

15. Regulatory Information

Fire Service Act : N/A

Chemical Substances Control Act : Priority assessment chemical substance No. 188: alpha-alkyl (C = 9 to 11)-omega-hydroxypoly (oxyethylene) (limited to those with a number average molecular weight of less than 1,000)

Pollutant Release and Transfer Register Act (PRTR Act) : Polyoxyethylene decyl ether (1.900%) (CAS RN: 26183-52-8): Class I, Cabinet Order No. 1-041, Control No. 580 [alpha-alkyl-omega-hydroxypoly (oxyethylene) (those with an alkyl group carbon number of 9 to 11 and their mixtures, but limited to those with a number average molecular weight of less than 1,000)]

Poisonous and Deleterious Substances Control Act : N/A

Industrial Safety and Health Act : Dangerous and harmful substances whose names, etc. should be indicated or notified (Appended Table 9) No.192 Iron oxide

Water Pollution Prevention Act : Designated substances (Article 3) No. 52 Iron and its compounds

16. Other Information

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)

Disclaimer

Safety Data Sheets are provided to business users of hazardous chemical products as reference information to ensure their safe handling.

The information contained in this SDS is based on the documents, information, and data available to us at the time of preparation or revision, but we do not represent any guarantee as to its correctness or safety.

All chemical products may have unknown hazards and should be handled with great care.

The precautions in this SDS assume normal handling. If this product is to be used in a special manner, the user is responsible for taking appropriate measures for that particular use. Please take safety measures appropriate for the usage.

This Safety Data Sheet was prepared in accordance with JIS Z 7253:2019 and is subject to change as new findings, including test results, become available.
