SAFETY DATA SHEET

1. 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		
Date of Creation:	January 24, 2018	Date of Revision:	January 21, 2021
Reference Number:	SDS15143-03e		
Product Code:	15143		
Recommended Uses and Restrictions on Use:	Magnetic particle testing		

2. Hazards Identification

GHS Classification

Physical Hazards	Flammable solid	Not classified
	Autoreactive chemical	Classification not possible
	Oxidizing solid	Classification not possible
	Organic peroxide	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	Category 2
	Serious eye damage/eye irritation	Category 1
	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 3 (respiratory tract irritation)
	Specific target organ toxicity (repeated exposure)	Category 1 (respiratory system)
	Aspiration hazard	Classification not possible
Environmental Hazards	Hazardous to the aquatic environment (acute)	Classification not possible
	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
May cause allergy, asthma, or dyspnea when inhaled
May cause an allergic skin reaction
May cause respiratory irritation
Causes damage to organs through prolonged or repeated exposure (respiratory system)

Precautionary Statement:

Prevention: Do not breathe dust.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Do not take contaminated work clothes out of the workplace.
Wear protective gloves/eye protection.
In case of insufficient ventilation, wear respiratory protection.

Response: IF ON SKIN: Wash with plenty of water and soap.
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 INHALED: Remove person to fresh air and keep comfortable for breathing.
If skin irritation or exanthema develops, get medical advice/attention.
If symptoms related to breathing develop, call a POISON CENTER/doctor.
Call a POISON CENTER/doctor, if you feel unwell.
Get medical advice/attention, if you feel unwell.
Take off contaminated clothing and wash when reusing.

Storage: 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	40–60	1317-61-9
Sodium bicarbonate	15–30	144-55-8
Fluorescent pigment	10–20	Trade secret
Iron	5–15	7439-89-6
Melamine resin	5–15	9003-08-1
Polyoxyethylene Decyl Ether	0–3	26183-52-8

4. First Aid Measures

IF INHALED	:	Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor, if you feel unwell.
IF ON SKIN	:	Wash with plenty of water and soap. If skin irritation or exanthema develops, 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	:	If the inside of the mouth is contaminated, wash thoroughly with water. Do not induce vomiting.

5. Firefighting Measures

Extinguishing Media	:	Powder extinguisher, foam extinguisher, etc.
Inappropriate Extinguishing Media	:	Straight stream of water.
Specific Hazards	:	When fighting fire, avoid inhalation of fumes as the combustion gases include carbon monoxide and other toxic gases.
Special Firefighting Procedures	:	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	:	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 dusts.
Environmental Precautions	:	Be careful not to discharge into rivers or anywhere else that would affect the environment.
Method 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 inhale or ingest dust. Do not touch or swallow. Wash hands thoroughly after handling.

Storage

Proper Storage Conditions	:	Store in a cool, well-ventilated place, away from direct sunlight. Keep containers sealed. Avoid moisture. Store at 40°C or below. Store locked up if necessary.
Safe Packaging Materials	:	Conform to product specification container.

8. Exposure Controls/Personal Protection

Control Levels	:	3.0 mg/m^3 (dust)
Permissible Exposure Levels		
Japan Society for Occupational Health (2016 version)	:	Dust inhaled as iron oxide 1 mg/m^3, Total dust 4 mg/m^3
Engineering Measures	:	In an indoor, inadequately ventilated workplace, provide local or general ventilation equipment. Install an eyewash instrument.
Protective Equipment		Wear the following protective equipment as needed:
Respiratory System Protection	:	Dust mask, etc.
Hand Protection	:	Appropriate protective gloves (PE or rubber gloves, 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

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	:	No data available
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	:	No data available
Solubility	:	Slightly soluble in water
Partition coefficient n-octanol/water (log value)	:	No data available
Vapor pressure	:	No data available
Density and/or relative density	:	No data available

Relative vapor density	:	No data available
Particle characteristics	:	10μm（5-16μm）

10. Stability and Reactivity

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

11. Toxicological Information

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 and Skin Irritation	:	It corresponds to Category 2 because the component of Category 2 (iron oxide) is 10% or more.
Serious Eye Damage or Eye Irritation	:	It corresponds to Category 1 because the component of Category 1 (iron oxide, polyoxyethylene decyl ether) is 3% or more.
Respiratory Sensitization or Skin Sensitization	:	Respiratory sensitization: It corresponds to Category 1 because the component of Category 1 (melamine resin) is 1% or more. Skin sensitization: It corresponds to Category 1 because the component of Category 1 (melamine resin) is 1% or more.
Germ Cell Mutagenicity	:	No data available
Carcinogenicity	:	No data available
Reproductive Toxicity	:	No data available
Specific Target Organ Toxicity, Single Exposure	:	It corresponds to Category 3 (respiratory tract irritation) because the component of Category 3 (iron oxide) is 20% or more.
Specific Target Organ Toxicity, Repeated Exposure	:	It corresponds to Category 1 (respiratory system) because the component of Category 1 (iron oxide) is 10% or more.
Aspiration Hazard	:	No data available

12. Ecological Information

Ecotoxicity	:	LC_{50} = 7,700 mg/L/96h (rainbow trout): sodium bicarbonate
Persistency/Degradability	:	No data available
Bioaccumulative Potential	:	No data available
Mobility in Soil	:	No data available
Hazardous to the Ozone	:	No data available

Layer

13. Disposal Considerations

- Have contents/container disposed of by an industrial waste disposal contractor licensed by the prefectural governor.
- No dumping is allowed.
- If this product is disposed of by landfill, incinerate it by using an incineration system in advance and check that the burned residue does not exceed the criteria defined in the Order for Enforcement of the Waste Management and Public Cleansing Act.
- If this product is burned, burn it in a safe place using a method that does not cause harm or damage due to burning or explosion and have someone stand guard.

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.

15. Regulatory Information

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

16. Regulatory 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)