# **Safety Data Sheet**

#### SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Product Name: M08 TONER

Product Code: M08

Relevant identified uses: Toner for electrophotographic apparatus

Supplier: IMEX Co., Ltd.

Address: 1630-8 Mitsutakazu Kita-ku Okayama-Shi Okayama 709-2124, Japan

Telephone number: +81-86-724-4402 FAX number: +81-86-724-2077

E-mail address: msds@imex-net.co.jp

#### SECTION 2 HAZARDS IDENTIFICATION

### 2.1 Emergency Overview:

Black fine powder with little or no odor.

Risk of dust-explosion if finely dispersed in air with an ignition source.

# 2.2 OSHA Regulatory Status:

Classification under GHS: Not classified

GHS Label Elements: None

#### 2.3 Potential Health Effects:

No significant hazards known.

### 2.4 Potential Environmental Effects:

No significant hazards known.

### SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

#### **Identification of Substance/Mixture: Mixture**

Ingredient Name	Weight %	CAS No.
Styrene acrylate copolymer	40-60	Confidential
Magnetite	30-50	1317-61-9
Paraffin wax	1-5	8002-74-2
Silica	1-5	67762-90-7
Titanium dioxide	<1	13463-67-7

# SECTION 4 FIRST AID MEASURES

**Inhalation:** Move to fresh air and gargle with water.

If accompanied with breathing difficulty, take first aid measures such as artificial

respiration and call a physician immediately.

**Skin contact:** Wash with soap and water.

**Eye contact:** Do not rub. Flush with large amount of water until particles are removed.

Seek medical advice

**Ingestion:** Rinse mouth. Seek medical advice.

### SECTION 5 FIREFIGHTING MEASURES

### 5.1 Suitable Extinguishing media:

Water spray or fog, CO<sub>2</sub>, dry chemicals

#### 5.2 Unsuitable Extinguishing media:

Strong water current may cause powder to disperse and form explosive dust-air mixture.

### 5.3 Protection of firefighters

Specific hazards arising from the chemical:

Fine powder may form explosive dust-air mixture if finely dispersed in air.

Fume and smoke may include toxic substances such as aromatic compounds.

Protective equipment and precautions for firefighters:

Avoid inhalation of fume and smoke.

#### SECTION 6 ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures:

Avoid breathing dust. Dust-proof masks should be worn when working.

#### 6.2 Environmental precautions:

Do not flush into sewer or natural watercourse.

#### 6.3 Methods for containment:

Keep in air-tight container.

### 6.4 Methods for cleaning up:

Sweep the spilled powder slowly.

Clean the remainder with wet cloth, wet paper, or vacuum cleaner.

Vacuum cleaner must be equipped with dust proof filter and must be explosion-proof.

#### SECTION 7 HANDLING AND STORAGE

#### 7.1 Precautions for safe handling:

Avoid breathing dust.

Keep away from ignition sources, especially where dust concentration may become high.

# 7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry location away from direct sunlight.

# **SECTION 8** Exposure controls/personal protection

### 8.1 Control parameters:

	OSHA PEL		ACGIH TLV	
	TWA	STEL	TWA	STEL
As toner mixture	15mg/m³(Inhalable fraction)	N.E.	10mg/m³(Total dust)	N.E.
	5mg/m³(Respirable fraction)		3mg/m³(Respirable fraction)	
			- , 2, , , ,	
Magnetite	15mg/m³(Inhalable fraction)	N.E.	5mg/m³ (as iron)	N.E.
	5mg/m³(Respirable fraction)			
Paraffin wax	N.E.	N.E.	2mg/m <sup>3</sup>	N.E.
Silica	6mg/m <sup>3</sup>	N.E.	10mg/m³(Total dust)	N.E.
			3mg/m³(Respirable fraction)	
Titanium dioxide	15mg/m³(Total dust)	N.E.	10mg/m <sup>3</sup>	N.E.
	5mg/m³(Respirable fraction)			

(N.E.= Not Established)

#### 8.2 Engineering controls:

Use of local ventilation is recommended.

#### 8.3 Personal protective equipment:

Eye/face protection: Protective goggles should be used when handling bulk.

Skin Protection: Full protective suits should be used when handling bulk.

Respiratory protection: Dust-proof mask should be used when handling bulk.

# **SECTION 9** Physical and chemical properties

### 9.1 Information on basic physical and chemical properties:

Appearance: Black powder
Odor: Slight odor
pH: Not applicable

Melting point: App. 120°C (Flow temperature)

Boiling point: No data Flash point: No data Evaporation rate: No data

Flammability: Not flammable

Explosive limits: No data

Vapor pressure: Not applicable Vapor density: Not applicable

Relative density: 1.3-1.8

Solubility: Insoluble to water, partially soluble to toluene and xylene

Partition coefficient: Not applicable
Auto-ignition temperature: Not applicable

Decomposition temperature: >200°C

Viscosity: Not applicable

Explosive properties: Explosive dust-air mixture is formed when finely dispersed in air

Oxidizing properties: Not applicable

9.2 Other information:

Particle Size: app.  $8.0\mu m$  (D<sub>50</sub>)

SECTION 10 Stability and reactivity

10.1 Reactivity:None10.2 Possibility of hazardous reactions:None10.3 Chemical stability:Stable10.4 Conditions to avoid:None10.5 Incompatible materials:None10.6 Hazardous decomposition products:No data

### **SECTION 11 Toxicological information**

### 11.1 Information on toxicological effects:

Acute toxicity: Not Classified\*

Inhalation: LC<sub>50</sub>; inh-rat>5.19mg/L/4 hours (maximum achievable concentration)

Ingestion:  $LD_{50} > 2000 \text{mg/kg}$ Irritation (Eye/Skin): Not classified as irritant\*

Corrosivity: Not available

Sensitization: Not classified as a sensitizer\*

Carcinogenicity: Not available

Titanium dioxide classified as "group 2B" by IARC, but the carcinogenicity of titanium dioxide is limited to lug overload conditions by dust inhalation tests. The content in this toner is considered to be modulated by their inclusion within the matrix of the mixture, not to be respirable by itself making the situation impossible to occur under

intended use of this toner.

Thus, carcinogenicity of this toner mixture is concluded to be "Not available".

Titanium dioxide: Substance is listed as "group 2B" by IARC, from the results of inhalation tests to rats.

This result is for excessive concentration of respirable dust of the substance causing lung overload of the rats, which results by exposure to other inert fine particles; thus, the effect assumed to have resulted by peculiar characteristics of rats' immune system. Epidemiological studies of titanium dioxide exposure to human do not show relationships to carcinogenic effects. Thus, enough data to classify carcinogenicity of

this substance is concluded to be "Not available".

Mutagenicity: Ames test negative\*

Reproductive toxicity: Not available STOT –single exposure: Not available STOT –RE: Not available Aspiration hazards: Not available

### **SECTION 12** Ecological information

# 12.1 Ecotoxicity

Not Classified\*

Fish(Oryzias latipes): LC<sub>50</sub>(96hr) > 100mg/L (WAF)

Crustaceans(Daphnia magna): EC<sub>50</sub>(48hr) > 100mg/L (WAF)

Algae(Pseudokirchneriella subcapitata): E<sub>r</sub>L<sub>50</sub>(0-72h)>100 mg/L, NOELR=100mg/L (WAF)

# 12.2 Persistence and degradability

Not available

#### 12.3 Bioaccumulative potential

Not available

<sup>\*</sup>data from toner with similar composition

### 12.4 Mobility in soil

Not available

#### 12.5 Other adverse effects:

Not available

\*data from toner with similar composition

# **SECTION 13** Disposal consideration

Dispose according to local authority requirements.

DO NOT release to sewer or natural watercourse.

DO NOT put toner powder or container into fire.

### **SECTION 14** Transport information

### **Basic shipping description**

UN number:

UN proper shipping name:

None

Transport hazard class(es):

Packing group:

None

Environmental hazards: Not classified as environmentally hazardous under UN Model

Regulations and marine pollutant under IMDG Code.

#### Additional information:

Handling such as exposure to water, rolling, falling, or giving shock to the container may result in breakage of the inner bag and result in scattering of the mixture.

Avoid direct sunlight and hot places. (See also: Section 7)

ADR / RID / ADN: not regulated IMDG Code: not regulated ICAO-TI / IATA-DGR: not regulated

### SECTION 15 Regulatory information

#### **Federal Regulations**

TSCA: All ingredients are on the inventory or exempt from listing.

SARA Title III Section 313: None

### **State Regulations:**

California Proposition 65:

Substances "Silica" and "Titanium dioxide" included in this toner are listed, but only airborne, unbound particles of respirable size are subject to the regulation.

Thus, these substances bound inside toner are not subject to the Proposition.

#### **SECTION 16** Other information

Issued according to GHS 8th revised edition and ANSI Z400.1/Z129.1-2010

### Indication of changes:

Apr. 2, 2024: First issued

Abbreviations:

CAS: Chemical Abstract Service

OSHA Occupational Safety and Health Administration

PEL Permissible Exposure Limit

ACGIH: American Conference of Governmental Industrial Hygienists

TLV: Threshold Limit Value
TWA: Time weighted Average
STEL: Short Term Exposure Limit

LC<sub>50</sub> Lethal Concentration to 50% of test population

LD<sub>50</sub> Lethal Dose to 50% of test population

D<sub>50</sub> volume-based median (50%) Diameter

IARC: International Agency for Research on Cancer

STOT: Specific Target Organ Toxicity

STOT RE Specific Target Organ Toxicity –Repeated Exposure

WAF Water Accommodated Fraction

EC<sub>50</sub> Effective Concentration to 50% of test population

NOEC No Observed Effect Concentration

E<sub>r</sub>L<sub>50</sub> Effective Loading rate that causes growth rate reduction to 50%

NOELR No Observed Effect Loading Rate

E<sub>b</sub>L<sub>50</sub> Effective Loading rate that causes 50% reduction in algal cell biomass

PBT Persistent, Bioaccumulative, and Toxic

UN United Nations

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road RID: Regulations concerning the International Carriage of Dangerous Goods by Rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG International Maritime Dangerous Goods

IATA-DGR: International Air Transport Association Dangerous Goods Regulations ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air

TSCA: Toxic Substances Control Act SNUR: Significant New Use Rule

SARA: Superfund Amendments and Reauthorization Act

ANSI: American National Standard Institute

Although the information contained in this SDS is prepared to be accurate to the best of our knowledge, please be aware that health and hazard assessment may not be enough and complete.

Since SDS may be revised due to regulation changes or product modifications, please confirm if this is the latest version, especially if the revision date is outdated for two years.