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# MATERIAL SAFETY DATA SHEET

Date/ Revision: November 6, 2007

# **1. PRODUCT AND COMPANY IDENTIFICATION** Product Name : Black Toner for FS-1100 Manufacturer Name : KYOCERA MITA CORPORATION

Name	
Address	: 2-28, 1-Chome, Tamatsukuri, Chuo-ku, Osaka, Japan, 540-8585
Supplier	
Name	: KYOCERA MITA Europe B.V
Address	: Hoeksteen 40, 2132 MS Hoofddorp, Netherlands

Telephone Number : +31(0)20-6540000

# 2. COMPOSITION/ INFORMATION ON INGREDIENTS

Substance or preparation ; Preparation

Ingredients;

Chemical Name(Common Name)	CAS No.	Weight %
Styrene acrylate copolymer-1	-	50-60
Magnetite	-	40-50
Styrene acrylate copolymer -2	-	1-5
Paraffin wax	-	1-5

#### **3. HAZARDS IDENTIFICATION** Most Important Hazards : None Specific Hazards : None Other Information on Hazards : Potential Health Effects Ingestion : Ingestion is not applicable route of entry for intended use. Inhalation : Prolonged inhalation of excessive dusts may cause lung damage. Use of this product, as intended, does not result in inhalation of excessive dusts. Eye Contact : May cause eye irritation. Skin Contact : Unlikely to cause skin irritation.

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4. FIRST-AID MEASURES			
Inhalation	: Remove from exposure to fresh air and gargle with plenty of water.		
	Consult a doctor in case of such a symptoms as coughing.		
Skin Contact	: Wash with soap and water.		
Eye Contact	: Flush with water immediately and see a doctor if irritating.		
Ingestion	: Rinse out the mouth. Drink one or two glasses of water to dilute.		
	Seek medical treatment if necessary.		

#### **5. FIRE-FIGHTING MEASURES**

Extinguishing Media	: Water (Sprinkle with Water), Foam, Powder, CO <sub>2</sub> or
	Dry Chemical Extinguisher
Fire-Fighting Procedure	: Pay attention not to blow away toner powder. Drain water off
	around and decrease the atmosphere temperature to
	extinguish the fire.

# 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	: Avoid inhalation, ingestion, eye and skin contact in case of accidental toner release.
Environmental Precautions	<ul> <li>No special precaution.</li> <li>Gather the released toner not to blow away and</li></ul>
Method for Cleaning Up	wipe up with a wet cloth.

# 7. HANDLING AND STORAGE

Handling	: Never open the toner container.
Storage : Keep the toner container tightly closed and store in a cool	
	dark place keeping away from fire.
	Keep away from children.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters<Reference Data>:

ACGIH TLV(2000)	: Total Dust 10mg/m <sup>3</sup>
OSHA PEL(2006)	: Total Dust 15mg/m <sup>3</sup>
Protective Equipment	: Respiratory protection, eye protection, hand protection, skin and
	body protection are not required under normal use.
Ventilation	: Ventilator is not required under normal use.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Арреа	irance				
	Physical state	: Solid	Form: Fine powder	Color: Black	Odor: Odorless
рН		: N.A.			
Melting	g Point	: 140 °	C		

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Evolution Properties	· Duet evaluation is improbable under normal use
Explosion Properties	: Dust explosion is improbable under normal use.
	Experimental explosiveness of toner is classified into the same
	rank such kind of powder as flour, dry milk and resin powder
	according to the pressure rising speed.
Specific Gravity	: 0.8 (Bulk density)
Solubility	: Almost insoluble in water

# **10. STABILITY AND REACTIVITY**

Stability/ Reactivity	: Stable under normal use.
Hazardous Decomposition Products	: None

# **11. TOXICOLOGICAL INFORMATION**

Acute oral toxicity	: (rat)LD <sub>50</sub> >2,500mg/kg
	(Estimated from other products containing same materials.)
Acute dermal toxicity	: (rat)LD <sub>50</sub> >2,000mg/kg
	(Estimated from other products containing same materials.)
Acute inhalation toxicity	: (rat)LC <sub>50</sub> (4hr)>5.13mg/l
	(Estimated from other products containing same materials.)
Acute eye irritation	: (rabbit)Mild irritant
A ( 11 · · · · /	(Estimated from other products containing same materials.)
Acute skin irritation	: (rabbit)Non-irritant
Skin sensitisation	(Estimated from other products containing same materials.) : (mouse)Non-Sensitiser
Skill Selfsillsalloll	(Estimated from other products containing same materials.)
<b>N A C C C C C C C C C C</b>	
Mutagenicity	: Ames Test is Negative.
Reproductive Toxicity	: No reproductive toxicant, according to MAK, California
	Proposition 65, TRGS905 and EU Directive(67/548/EEC).
Carcinogenicity	: No carcinogen or potential carcinogen, according to IARC,
	Japan Association on Industrial Health, ACGIH, EPA, OSHA, NTP,
	ILO, MAK, California Proposition 65, TRGS 905 and
	EU Directive(67/548/EEC).

Chronic effects:

In a study in rats by chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of the rats in the high concentration(16mg/m<sup>3</sup>) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animal in the middle(4mg/m<sup>3</sup>) exposure group. But no pulmonary change was reported in the lowest(1mg/m<sup>3</sup>) exposure group, the most relevant level to potential human exposures. Other information : None

#### **12. ECOLOGICAL INFORMATION**

No data available.

### **13. DISPOSAL CONSIDERATIONS**

Do not incinerate toner and toner containers. Dangerous sparks may cause burn.

Any disposal practice should be done under conditions which meet local, state and federal laws and regulations relating to waste (contact local or state environmental agency for specific rules).

#### **14. TRANSPORT INFORMATION**

: None

UN No.

UN Shipping Name : None

UN Classification : None

UN Packing Group : None

Special Precautions : None

# **15. REGULATORY INFORMATION**

#### EU Information

Label information according to the Directives 67/548/EEC and 1999/45/EC.

Symbol and Indication	: Not required
R-Phrase	: Not required
S-Phrase	: Not required
Special markings	: Not required
Hazardous ingredients for	or labeling: None

#### **US** Information

All components in this product comply with order under TSCA.

#### **16. OTHER INFORMATION**

To the best of our knowledge, the information contained herein is accurate.

However, we cannot assume any liability whatsoever for the accuracy or completeness of the information contained herein.

<Abbreviation>

ACGIH	: American Conference of Governmental Industrial Hygienists

- PEL : Permissible Exposure Limit
- OSHA : Occupational Safety and Health Administration

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TLV	: Threshold Limit Value
MAK	: MAK(Maximale Arbeitsplatzkonzentrationen) under Deutsche
	Forschungsgemeinschaft
TRGS	: Technische Regeln für Gefahrstoffe(Deutsche)
IARC	: International Agency for Research on Cancer
EPA	: Environmental Protection Agency(USA)
NTP	: National Toxicology Program
ILO	: International Labour Office
UN	: Nnited Nations
TSCA	: Toxic Substances Control Act(USA)

<Reference>

- ISO 11014-1 Safety data sheet for chemical products
- Commission Directive 91/155/EEC and 2001/58/EC
- Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats H.Muhle et.al

Fundamental and Applied Toxicology 17.280-299(1991)

 Lung Clearance and Retention of Toner, Utilizing a Tracer Technique, during Chronic Inhalation Exposure in Rats
 B.Bellmann
 Fundamental and Applied Toxicology 17.300-313(1991)