

# Safety Data Sheet

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

*1.1. Product identifier:* Toner Cartridge M S050040

1.2. Relevant identified uses of the substance or mixture and uses advised against:

Identified uses; Toner for electrophotographic printing

1.3. Details of the supplier of the saf	fety data sheet:
Distributor: EPSON EUROPE B.V.	
Address:	Azie building, Atlas ArenA, Hoogoorddreef
	5,1101 BA Amsterdam
	Zuidoost The Netherlands
	www.epson-europe.com
<i>TEL:</i> +31-20-314-5000	FAX: +31-20-314-5100
e-mail:	chemicals@epson-europe.com
Date Prepared:	7 September 2012
Revision:	А
1.4. Emergency telephone number:	Giftnotruf Berlin +49 030 19240

#### SECTION 2: Hazards identification 2.1 Classification of the mixture:

2.1. Classification of the mixture:	
Classification (1999/45/EC);	; Not Classified
2.2. Label elements:	Label in Accordance with 1999/45/EC
Symbol(s);	None
Indication(s) of danger;	None
Risk phrase;	None
Safety advice;	None

#### 2.3. Other hazards:

Classification (PBT,vPvB (EC)No1907/2006); No data available

#### SECTION 3: Composition/information on ingredients Substance / Mixture: Mixture (Toner Composition)

Toner Composition	CAS No.	EEC No.	EU registration No.	% By Weight	EU Symbols	EU R-phrase	EU OELs	Remark
Polyester resin	Tradesecret	Tradesecr et	Not available for the moment	50 - 60	None	None	None	None
Mn-Mg-Sr ferrite powder	Tradesecret	Tradesecr et	Not available for the moment	20 - 30	None	None	None	None
Red pigment	Tradesecret	Tradesecr et	Not available for the moment	1 - 5	None	None	None	None
Amorphous silica	7631-86-9	231-545-4	Not available for the moment	1 - 5	None	None	None	None
Titanium Dioxide	13463-67-7	236-675-5	Not available for the moment	1 - 5	None	None	None	None
Carbon black	1333-86-4	215-609-9	Not available for the moment	< 1	None	None	None	None



#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

*4.1.1. Eyes :* Immediately flush with room temperature, low pressure and clean water for at least 15 minutes. Seek medical attention if eye irritation continues.

*4.1.2. Skin :* Wash surface areas with soap and water. Wash soiled clothing before wearing again. Consult a physician if irritation continues.

**4.1.3.** *Inhalation* : Remove subject to ventilated fresh air. If not breathing, give artificial respiration right away. If breathing is difficult, give oxygen. Seek immediate medical attention.

4.1.4. Ingestion : Seek medical advice; and attention if stomach continues to be upset.

#### 4.2. Most important symptoms and effects, both acute and delayed:

Skin: Toner contact with skin may cause irritation, swelling or redness.

Inhalation: Prolonged inhalation of excessive toner may cause respiratory tract irritation.

4.3. Indication of any immediate medical attention and special treatment needed: Not necessary

#### **SECTION 5: Fire-fighting measures**

5.1. Extinguishing Media

5.1.1.Suitable extinguishing media: Dry chemical, carbon dioxide or water spray.

- 5.1.2. Unsuitable extinguishing media: None known.
- 5.2. Special hazards arising from the substance or mixture: CO, NOx
- 5.3. Advice for firefighters: No special fire fighting procedures are required other than breathing apparatus.

No special explosion hazards are known.

#### **SECTION 6: Accidental release measures**

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

6.1.1. For non-emergency personnel: Eye or Skin protection required during clean-up. Use proper ventilation.6.1.2. For emergency responders: None

6.2. Environmental precautions: Do not release to sewer, surface- or ground-water.

#### 6.3. Methods and material for containment and cleaning up

6.3.1. Advice on how to contain a spill: Use wet sponges or cloths to wipe-up the materials.

6.3.2. Advice how to clean-up a spill: Rinse area with damp cloth. Place waste in closed container for disposal.

Wash hands with soap and water.

- 6.3.3. Any other information: Do not dispose of waste to the sewer.
- 6.4. Reference to other sections: None

## **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

7.1.1. Recommendations: Keep out of reach of children. Do not dismantle cartridge.

## 7.1.2. Advice on general occupational hygiene:

Avoid inhaling toner. In the case of prolonged inhalation of excessive toner, seek immediate medical attention.

## 7.2. Conditions for safe storage, including any incompatibilities:

Do not store the cartridge in high or freezing temperatures. Keep cartridge out of direct sunlight. Do not store cartridges with oxidizing agents or explosives.

7.3. Specific end use(s): Not specified

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

## 8.1. Control parameters:

<u>As total dust</u> US: ACGIH-TLV is: 10mg/m<sup>3</sup> US: OSHA-PEL is: 15mg/m<sup>3</sup>



Germany: DFG-MAK is: 4mg/m<sup>3</sup> Australia: Worksafe-TWA is: 10mg/m<sup>3</sup>

#### 8.2. Exposure Controls

8.2.1. Appropriate engineering controls: Proper ventilation, in prevention
8.2.2. Individual protection measures, such as personal protective equipment
8.2.2.1. Use of personal protective equipment:

Not required under suitable use as setting the cartridge on the printer. 8.2.2.2. Detailed specification on equipment to provide adequate and suitable protection

(a) eye/face protection: Not required under suitable use as setting the cartridge on the printer.
(b) skin protection: hand protection & others:

(c) respiratory protection:
(d) thermal hazards:
(e) Not required under suitable use as setting the cartridge on the printer. Not required under suitable use as setting the cartridge on the printer.

8.2.3. Environmental exposure controls: Not established

#### **SECTION 9: Physical and chemical properties**

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

9.1. Information on basic physical and chemic	ai properties:
Appearance:	Magenta powder
Odour:	Slightly
Odour threshold:	No data available
pH:	Not applicable
Melting point / freezing point:	No data available
Initial boiling point and boiling range:	Not applicable
Flash point:	Not applicable
Evaporation rate:	No data available
Flammability (solid, gas):	Not flammable
Upper/lower flammability or explosive limits	No data available:
Vapor pressure:	Not applicable
Vapor density:	Not applicable
Relative density:	No data available
Solubility(ies):	Negligible
Partition coefficient: n-octanol/water:	Not applicable
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	Not applicable
Explosive properties:	No data available
Oxidizing properties:	No data available
9.2. Other information:	None

#### **SECTION 10:Stability and reactivity**

10.1. Reactivity:	Stable under normal temperature
10.2. Chemical stability:	Stable under normal temperature
10.3. Possibility of hazardous reactions:	None
10.4. Conditions to avoid:	High and freezing temperatures, electric discharge
10.5. Incompatible materials:	Oxidizers and explosives
10.6. Hazardous decomposition products:	$CO, CO_2$ and $NOx$

## **SECTION 11: Toxicological Information**

11.1. Information on toxicological effects:

Acute toxicity: Not meet the criteria for classification according to EU Directive 1999/45/EC Oral LD<sub>50</sub>: >5000 mg/kg (Rat)



	Dermal LD <sub>50</sub> : >5000 mg/kg		
	Inhalant LC <sub>50</sub> : >4.1 mg/L/4hr (Rat)		
Irritation E	<i>ye:</i> Not meet the criteria for classification according to EU Directive 1999/45/EC Non irritant (Rabbit)		
S	<i>kin:</i> Not meet the criteria for classification according to EU Directive 1999/45/EC Non irritant (Rabbit)		
Corrosivity:	Not meet the criteria for classification according to EU Directive 1999/45/EC Not corrosive		
Sensitisation: S	<i>kin:</i> Not meet the criteria for classification according to EU Directive 1999/45/EC Not a sensitiser (Guinea Pig)		
Inhalat	ion: Not meet the criteria for classification according to EU Directive 1999/45/EC		
Chronic Health H	lazards: Prolonged inhalation of excessive dust may cause lung damage. It is attributed to "lung		
	overloading", a generic response to excessive amounts of any dust retained in the lungs for		
a prolonged interval. Use of this product, as intended, does not result in inhalation of			
excessive dust.			
	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 rats in the high concentration $(16 \text{mg/m}^3)$			
	exposure group, and a minimal to mid degree of fibrosis was noted in 22% of the animals $\frac{1}{2}$		
	in the middle $(4\text{mg/m}^3)$ exposure group. But no pulmonary change was reported in the		
~	lowest $(1\text{mg/m}^3)$ exposure group, the most relevant level to potential human exposures.		
Carcinogenicity:	Not meet the criteria for classification according to EU Directive 1999/45/EC		
	Carbon Black is classified as "Group 2B (possibly carcinogenic to humans)" by IARC, the		
	International Agency for Research on Cancer. With excessive exposure, carbon black has		
	been listed as a possible human carcinogen. However, we obtained the results fro		
	Titanium dioxide is classified as "possibly carcinogenic to humans" (Group 2B) by IARC.		
	In animal chronic inhalation studies, the tumor formulation observed in only rats with		
	animal chronic inhalation study are attributed to "lung overloading", a generic		
Mutagenicity:	Not meet the criteria for classification according to EU Directive 1999/45/EC		
Torisity for more	Negative (by Ames test) duction: Not meet the criteria for classification according to EU Directive 1999/45/EC		

Toxicity for reproduction: Not meet the criteria for classification according to EU Directive 1999/45/EC

## **SECTION 12:Ecological information**

12.1. Toxicity:	No data available	
12.2. Persistence and degradability:	No data available	
12.3. Bioaccumulative potential:	No data available	
12.4. Mobility in soil:	No data available	
12.5. Results of PBT and vPvB assessment: Has not carried out PBT and vPvB assessment		
12.6. Other adverse effects:	No data available	

## **SECTION 13: Disposal considerations**

*13.1. Waste treatment methods:* Disposal should be in accordance with federal, state, and local requirements.

#### **SECTION 14: Transport information**

14.1. UN number:	Not applicable	
14.2. UN proper shipping name:	Not applicable	
14.3. Transport hazard class(es):	Not applicable	
14.4. Packing group:	Not applicable	
14.5. Environmental hazards:	Not applicable	
14.6. Special precautions for user: Not applicable		
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable		



## **SECTION 15: Regulatory Information**

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture: EU Information: Regulation (EC) No 2037/2000: Is not subject Regulation (EC) No 850/2004: Is not subject Regulation (EC) No 689/2008: Is not subject US Information: TSCA Section 4(a) Final Test Rules Regulated: Not regulated TSCA Section 5 Significant New Use Rule Regulation: Not regulated TSCA Section 8(a) Preliminary Assessment Information Rule (PAIR): Not regulated TSCA Section 12(b) One-Time Export Notification Regulated: Not regulated California Proposition 65: This material contains Titanium dioxide, a chemical known to the State of California to cause cancer. Canada Information: WHMIS Controlled Product: Not applicable (Manufactured article) Australia Information: Statement of Hazardous Nature: Not classified as hazardous according to criteria of NOHSC

15.2. Chemical safety assessment: This toner has not carried out any Chemical Safety Assessment yet.

#### **SECTION 16: Other Information**

List of relevant R-phrases: Nothing

This "Material Safety Data Sheet" contains health, safety, and environmental information. It does not replace any precautionary language or use and disposal information which accompanies the product. The information contained herein is believed to be accurate at the time of preparation, but should only be used as a guide. It is subject to revision from time to time. EPSON does not warrant the completeness or accuracy of the information contained herein.