

## Safety Data Sheet

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

1.1. Product identifier

Mixture identification:

Trade name: TONER CARTRIDGE(Black) (C13S050750)

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

Recommended use:

Toner for electrophotographic printing

1.3. Details of the supplier of the safety data sheet

Company:

EPSON EUROPE B.V.

Azie building, Atlas ArenA, Hoogoorddreef 5, 1101 BA Amsterdam

Zuidoost The Netherlands

Phone number: +31-20-314-5000

Competent person responsible for the safety data sheet:

chemicals@epson-europe.com

Date: 23/2/2018

Revision: 0.1

1.4. Emergency telephone number

Phone number: +31-20-314-5000

United Kingdom; 01952 607111 Monday to Friday 9am to 5:30pm.

Emergency Action: In the event of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency department.

### SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Hazard pictograms:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

None

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

### SECTION 3: Composition/information on ingredients

3.1. Substances

No

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

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Qty	Name	Ident. Number	Classification
75% ~ 85%	Styrene acrylic resin	CAS: Trade secret EC: Not available	The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
10% ~ 20%	Wax	CAS: Trade secret EC: Not available	The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
1% ~ 10%	Carbon Black	CAS: 1333-86-4 EC: 215-609-9	The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
1%~ 10%	Amorphous silica	CAS: 7631-86-9 EC: 231-545-4	The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

**SECTION 4: First aid measures**

4.1. Description of first aid measures

In case of skin contact:

Wash surface areas with soap and water. Wash soiled clothing before wearing again.

Consult a physician if irritation continues.

In case of eyes contact:

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

In case of Ingestion:

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

In case of 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.

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

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

4.3. Indication of any immediate medical attention and special treatment needed

Treatment:

Not necessary

**SECTION 5: Firefighting measures**

5.1. Extinguishing media

Suitable extinguishing media:

Dry chemical , carbon dioxide or water spray.

Extinguishing media which must not be used for safety reasons:

Full water jet.

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

Eye or Skin protection required during clean-up.

6.2. Environmental precautions

Do not release to sewer, surface- or ground-water.

6.3. Methods and material for containment and cleaning up

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Use wet sponges or cloths to wipe-up the materials.  
Rinse area with damp cloth. Place waste in closed container for disposal.  
Wash hands with soap and water.  
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  
Keep out of reach of children. Do not dismantle cartridge.  
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  
As total dust  
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  
Eye protection:  
Not required under suitable use as setting the cartridge on the printer.  
Protection for skin:  
No special precaution must be adopted for normal use.  
Protection for hands:  
Not required under suitable use as setting the cartridge on the printer.  
Respiratory protection:  
Not required under suitable use as setting the cartridge on the printer.  
Thermal Hazards:  
Not required under suitable use as setting the cartridge on the printer.  
Environmental exposure controls:  
Not established.  
Appropriate engineering controls:  
Proper ventilation, in prevention.

### SECTION 9: Physical and chemical properties

- 9.1. Information on basic physical and chemical properties
- |   |                                     |
|---|-------------------------------------|
| Appearance and colour:                        | Black powder                        |
| Odour:  | Almost odorless                     |
| Odour threshold:                              | No data available                   |
| pH:   | Not applicable (Powder, solid)      |
| Melting point / freezing point:               | Around 125°C(257F)(Softening Point) |
| Initial boiling point and boiling range:      | Not applicable (Powder, solid)      |
| Solid/gas flammability:                       | No data available                   |
| Upper/lower flammability or explosive limits: | No data available                   |
| Vapour density:                               | Not applicable (Powder, solid)      |
| Flash point:                                  | Not applicable (Powder, solid)      |

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Evaporation rate:	No data available
Vapour pressure:	Not applicable (Powder, solid)
Solubility in water:	Insoluble in water
Partition coefficient (n-octanol/water):	Not applicable (Powder, solid)
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	Not applicable (Powder, solid)
Explosive properties:	No data available
Oxidizing properties:	No data available
9.2. Other information	
Miscibility:	None
Fat Solubility:	None
Conductivity:	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<sub>2</sub>, NO<sub>x</sub> and Smoke.

### SECTION 11: Toxicological information

- 11.1. Information on toxicological effects
  - Acute toxicity: Not meet the criteria for classification according to EC regulation 1272/2008 (CLP)
    - Oral LD50: >2500 mg/kg (Rat) (practically non-toxic)
    - Dermal LD50: > Not applicable
    - Inhalant LC50: >5.10mg/L/4hr (Rat) (practically non-toxic)
  - Irritation Eye: Not meet the criteria for classification according to EC regulation 1272/2008 (CLP)  
Not an irritant (Rabbit)
  - Skin: Not meet the criteria for classification according to EC regulation 1272/2008 (CLP)  
Not an irritant (Rabbit)
  - Corrosivity: Not meet the criteria for classification according to EC regulation 1272/2008 (CLP)
  - Sensitisation: Skin: Not meet the criteria for classification according to EC regulation 1272/2008 (CLP)  
Not a sensitizer (Guinea-pig)  
Inhalation: Not meet the criteria for classification according to EC regulation 1272/2008 (CLP)
- Chronic Health Hazards: 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 (16mg/m<sup>3</sup>) exposure group, and a minimal to mid degree of fibrosis was noted in 22% of the animals 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.

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Carcinogenicity: 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 from a Chronic Toner Inhalation Study, that commercially available toner has no evidence of human carcinogens. All other ingredients are not classified as "Carcinogens".

Mutagenicity: Not meet the criteria for classification according to EC regulation 1272/2008 (CLP)

Negative (by Ames test)

Toxicity for reproduction: Not meet the criteria for classification according to EC regulation 1272/2008 (CLP)

### 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 MARPOL73/78 and the IBC Code  
Not applicable

### SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Dir. 98/24/EC (Risks related to chemical agents at work)
  - Dir. 2000/39/EC (Occupational exposure limit values)
  - Regulation (EC) n. 1907/2006 (REACH)
  - Regulation (EC) n. 1272/2008 (CLP)

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Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013  
Regulation (EU) 2015/830  
Regulation (EU) n. 286/2011 (ATP 2 CLP)  
Regulation (EU) n. 618/2012 (ATP 3 CLP)  
Regulation (EU) n. 487/2013 (ATP 4 CLP)  
Regulation (EU) n. 944/2013 (ATP 5 CLP)  
Regulation (EU) n. 605/2014 (ATP 6 CLP)

Restrictions related to the product or the substances contained according to Annex XVII  
Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

No restriction.

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions :

Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.

Regulation (EC) nr 648/2004 (detergents).

1999/13/EC (VOC directive)

Provisions related to directives 82/501/EC(Seveso), 96/82/EC(Seveso II):

No data available

### 15.2. Chemical safety assessment

This mixture(toner) has not carried out any Chemical Safety Assessment yet.

## SECTION 16: Other information

This "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.