EPSON

Product Information Sheet

1. Article and Corporate Identification

***Product**:* Epson Toner Cartridge S050188

Manufacturer/Distributor: EPSON Europe B.V.
Entrada 701
1096 EJ, Amsterdam
The Netherlands
Internet : www.epson-europe.com

Medical Emergency Number: Giftnotruf Berlin +49 030-19240

2. Composition Information

This toner is a preparation.

Composition	CAS No.	% By Weight
Carbon Black	1333-86-4	< 5 % (black) < 1 % (other color)
Colorants	–	< 10 %
Organic materials	–	65 – 90 %
Inorganic materials	–	20 – 25 %

3. Hazard Identification

Not classified as hazardous preparation under EU Directive 1999/45/EC.

3.1 Physical and Chemical Hazard: There are no significant hazards associated with this product.
3.2 Adverse Human Health Effects: This toner is not classified as a human carcinogen and is of no significant hazards. No symptoms expected with intended use.
3.3 Environmental Effects: There are no significant hazards associated with this product.

4. First Aid Measures

4.1 Eyes: Flush with a large amount of water for at least 15 minutes. Seek medical advice.

4.2 Skin: Wash with soap and water.

4.3 Inhalation: Remove from exposure and provide fresh air. Rinse mouth with water.

4.4 Ingestion: Rinse mouth with water. Give several glasses of water to drink and seek medical advice.

5. Fire Fighting Measures

5.1 Flammable Properties: This material has no unusual fire or explosive hazards.
5.2 Extinguishing Media: Water spray, form or dry chemical.
5.3 Fire Fighting Instructions: No special equipment is required.
5.4 Fire and expression hazards: If dispersed in air, like most finely divided organic powders, may form an explosive mixture.

6. Accidental Release Measures

6.1 Personal protections: Not applicable under intended use.
6.2 Methods for cleaning up: Wipe off with paper or cloth. Do not use a vacuum cleaner when released a large amount.

7. Precautions for Safe Handling and Use

7.1 Handling: Do not incinerate toner or a toner cartridge. Do not dismantle a cartridge.
7.2 Storage: Keep in cool, dry and well-ventilated area. Keep out of reach of children.

8. Exposure Controls and Personal Protection

8.1 Engineering Controls: No specific controls are needed.

8.2 Exposure Controls:
ACGIH-TLV(USA) **:** 10mg/m^3
OSHA(USA) **:** 15mg/m^3
DFG-MAK(EU) **:** 6 mg/m^3
Worksafe-TWA(Austl) 10mg/m^3

Carbon black
OES-TWA (UK HSE) : 3.5 mg/m^3
OES-STEL (UK HSE) : 7 mg/m^3

8.3 Personal Protection: None required when cartridges are used as intended

9. Physical and Chemical Properties

Appearance:	Colored powder
Odor:	Faint odor
Boiling point (OC):	Not applicable
Softening point:	Not available
Vapor pressure	Not applicable
Solubility in water:	Negligible
Specific gravity:	Not applicable
Flash point (OC):	Not applicable
Auto-Ignition Temperature:	Not applicable
Explosion limit:	Not applicable
Other data:	None

10. Stability and Reactivity

Flammability:	Not flammable under conditions of use.
Spontaneous combustibility/Reactivity with water:	None
Self-reactivity/Explosive:	None
Dust explosion:	Like most organic materials in powder form, it can form explosive mixtures when dispersed in air.

Stability and Reactivity: Stable
Other Data: None

11. Toxicology and Health Hazards

*Based on toxicology data of chemically similar material.

Acute Health Hazards:

Toxicity Data:	Oral LD_{50}	Dermal LD_{50}	Inhalant LC_{50}
	> 5.0g/kg(Rats)*	> 5.0g/kg(Rabbit)*	>4.1mg/L/4hr*

Skin corrosive: None

Irritation Skin: Not an irritant (Rabbit)*
Eye: Not an irritant (Rabbit)*

Skin sensitization: None (Guinea-pig)*

Mutagenicity: Negative (by Ames Test)*

Carcinogenicity: Carbon Black is classified as "Group 2B (possibly carcinogenic to humans)" by IARC. But 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".

Reproduction and Development: Not classified as "Reproductive and Development chemicals".

Chronic toxicity of long term toxicity :

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^3) exposure group, and a minimal to mid degree of fibrosis was noted in 22% of the animals in the middle (4mg/m^3) exposure group. But no pulmonary change was reported in the lowest (1mg/m^3) exposure group, the most relevant level to potential human exposures.

12. Ecological Information

*Based on toxicology data of chemically similar material.

Biodegradability: Not available.
Bioaccumulation: Not available.
Acute Toxicity: 96hr LC_{50}(Rainbow trout): >500mg/L*
48hr EC_{50}(Daphnia magna): >100mg/L*
Other information: None

13. Disposal Considerations

Disposal should be in accordance with national and local requirements.

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14. Transportation Information

UN Class/UN Number: Not applicable
DOT, IMO, or IATA : Not hazardous classification

15. Regulatory Considerations

U.S. Regulations:
TSCA Inventory: All components are compliant with TSCA chemical inventory regulations or exempted.
EU Regulations:
EU Inventory: All components are compliant with EU chemical inventory regulations or exempted.

Consumables are out the scope of EU Directive 2002/95/EC(RoHS)

16. Other Information

This "Product Information 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.

In consideration of our environment and world neighbors, all genuine EPSON toner cartridges are engineered and based on an "Ecologically Friendly" technology. EPSON toner cartridges contain no CFCs or harsh liquid solvents.