

Material Safety Data Sheet
In according to the Regulation (CE) n. 1907/2006 REACH
Rev. Date: 06/09/2018
Data Sheet B1179in Rev. n. 1

1. Identification of the Product and of the Company

Product name:	Toner cartridge K d-Color MF3003/3004/P2130
Code number:	B1179
Product description:	Black toner.
Company name:	Olivetti S.p.A. Via Jervis 77 10015 Ivrea (TO) - ITALY
For information:	Tel. 0039 (0)125 775710 Fax 0039 (0)125 775711 e-mail : supplies@olivetti.com
For emergency:	Centro Antiveleni-Ospedale Niguarda (Milano) 0039 (0)2 66101029

2. Hazards identification

Classification: Not classified as dangerous in according to the Regulation EC n°1272/2008

Emergency Overview: Black powder (mean dia. is 5-10um by volume).
Almost oderless.

Most Important Hazards and Effects of the Products

Ingestion Effect: None currently known.

Inhalation Effect: None currently known. Minimal respiratory tract irritation may occur as with exposure to large amount of any non-toxic dust.

Eye Effect: None currently known.

Skin Effect: None currently known.

Chronic Effects: Prolonged inhalation of excessive dusts may cause lung damage. Use of this product, as intended, does not result in inhalation of excessive dust.

Environment Hazards: No data are available on the adverse effects of this product on the environment.

Specific Hazards: Dust explosion (like most finely divided organic powders)

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3. **Composition/information on ingredients**

Substance [] Preparation [X]

Chemical name	Weight %	CAS number	EINECS number	EU classification
Polyester resin	70-80	+++	+++	Not classified
Styrene acrylate copolymer	1-5	+++	215-695-8	Not classified
Carbon Black	5-10	1333-86-4	215-609-9	Not classified
Silica amorphous	1-5	7631-86-9	231-545-4	Not classified
Titanium dioxide	<1	13463-67-7	236-675-5	Not classified

+++ : Supplier's confidential information

Carbon black Reach registration number:01-2119384822-32-XXXX

4. **First – aid measures**

- Ingestion:** Wash out mouth with water. Drink one or two glasses of water. If symptoms occur, get medical attention.
- Inhalation:** Move victim to fresh air immediately. If symptoms occur, get medical attention.
- Eye contact:** Immediately flush eyes with plenty of water for 15 minutes. If symptoms occur, get medical attention.
- Skin contact:** Wash with water and mild soap.

5. **Fire – fighting measures**

- Suitable Extinguishing Media:** CO2, water spray, foam and dry chemical.
- Suitable Extinguishing Media to Avoid:** Full water jet
- Fire and Explosion Hazards:** If dispersed in air, like most finely divided organic powders, may form an explosive mixture.
- Protection of fire-fighters:** Use self-contained breathing apparatus (SCBA)

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6. Accidental release measures

Personal precautions:	None
Environmental precautions:	None.
Methods for Cleaning-up:	Wear personal protective equipment (See Section 8). Vacuum or sweep material and place in a bag and hold for waste disposal. Use vacuum equipped with High Efficiency Particulate Air (HEPA) filter. Vacuum should be electrically bonded and grounded to dispel static electricity. To avoid dust generation, do not sweep dry.

7. Handling and storage

Handling:	
Technical Measures:	None
Precautions:	Do not breathe dust. Avoid contact with eyes.
Safe Handling Advice:	Try not to disperse the particulates.
Storage:	
Technical Measures:	None
Storage Conditions:	Keep container closed. Store in a cool and dry place. Keep out of reach of children.
Incompatible Products:	None
Packaging Materials:	Bottles or Cartridge designated

8. Exposure controls/personal protection

Ventilation:	None required with intended use
Hygiene measures:	Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.
Exposure limit value:	Carbon Black: OSHA Z-Tables (USA): 3.5 mg/m ³ ; ACGIH-TLV (USA) : 3.5 mg/m ³ ; NTP (USA): Not listed; IARC Monographs: Group 2B; California Proposition 65 (USA): Listed; DFG-MAK (GER): III 3B; Worksafe-TWA (Austl): 3 mg/m ³ .
Personal Protective Equipment:	Not required under normal conditions. For use other than in normal operating procedures (such as in the event of large spill), goggles and respirators may be required.

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9. Physical and chemical properties

Physical state:	Solid
Form:	Powder (mean dia. Is 5-10 um by volume)
Color:	Black
pH	Not applicable
Odor:	Almost odorless
Boiling point (°C)	Not applicable
Melting point (°C / [F]):	100-120°C
Flash Point (°C):	Not applicable
Ignition Temperature (°C)	No data available
Vapor Pressure:	Not applicable
Specific Gravity:	1,2 -1,4 g/cm3
Solubility:	Insoluble in water
Partition Coefficient, n-Octanol/Water:	Not applicable

10. Stability and reactivity

Stability:	Stable except above 200 °C (392 F).
Hazardous Reactions:	Dust explosion, like most finely divided organic powders.
Conditions to avoid:	Electric discharge, throwing into fire.
Materials to Avoid:	Oxidizing materials.
Hazardous decomposition products:	CO, CO ₂ , NO _x and smoke. Hazardous Polymerization: Will not occur.

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11. Toxicological information

Acute Toxicity:

Ingestion(oral), LD50(mg/kg): >2000 (Rat)
Dermal, LD50(mg/kg): >2000 (Rat)
Inhalation, LC50(mg/l): >5 (Rat,4hour)
(This was the highest attainable concentration)
Eye irritation: Minimal irritant (Rabbit)
Skin irritation: Mild irritant (Rabbit)

Skin sensitizer: Non sensitizer (Guinea pig)

Local Effects: see Chronic Toxicity or Long term Toxicity

Chronic Toxicity or Long Term Toxicity:

In a two-year inhalation study of chronic toxicity and carcinogenicity using a typical toner in rats, there were no lung changes at all in the lowest exposure level (1mg/m³), the most relevant level to potential human exposures. A minimal to mild degree of fibrosis was noted in 22% of the animals at the middle exposure level (4mg/m³), and a mild to moderate degree of fibrosis was observed in 92% of the rats at the highest exposure level(16mg/m³). The lung changes observed in the higher exposure groups are interpreted in terms of "lung overloading", a series of generic responses to the presence of large quantities of respirable, insoluble and relatively benign dusts retained for extended time periods in the lungs. Lung tumor frequency was unchanged among rats exposed to toner at the three exposure levels, and for air-only control rats.

Carcinogenicity:

In 1996 the IARC reevaluated carbon black as a Group 2B carcinogen (possible human carcinogen). This evaluation is given to Carbon Black for which there is inadequate human evidence, but sufficient animal evidence. The latter is based upon the development of lung tumors in rats receiving chronic inhalation exposures to free carbon black at levels that induce particle overload of the lung. Studies performed in animal models other than rats have not demonstrated an association between carbon black and lung tumors. Moreover, a two-year cancer bioassay using a typical toner preparation containing carbon black demonstrated no association between toner exposure and tumor development in rats.

Mutagenicity: Negative(AMES test)

12. Ecological information

No data are available on the adverse effects of this material on the environment.

Ecotoxicity: No data available
Mobility: No data available
Persistence and degradability: No data available
Bioaccumulative potential: No data available

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13. Disposal considerations

When disposing of the waste or recovered material, consult federal, state and/or local regulations for the proper disposal method.

14. Transport information

Information on Code and Classifications According to International Regulations

UN Classification: None

15. Regulatory information

EU regulations

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer, Annex I and Annex II: Not listed

Regulation (EC) No 850/2004 on persistent organic pollutants, Annex I as amended: Not listed

Regulation (EC) No 689/2008 concerning the export and import of dangerous chemicals, Annex I and Annex V as amended: Not listed.

Regulation (EC) No 1907/2006 REACH, Annex XVII as amended (Restrictions on use): Not listed.

Regulation (EC) No 1907/2006 REACH, Annex XIV as amended (Authorisations): Not listed.

16. Other information

This Material Safety Data Sheet was prepared in according to the Regulation (CE) n. 1907/2006 REACH and Regulation EC n°1272/2008.

This information adds to those contained in the 'Instructions of use' for same product, but does not substitute them.

The information contained herein relates only to the referred product as manufactured and put into the market, and is not valid for other combinations of same materials.

It is the user's responsibility to determine the suitability of such information for his intended use.