

MATERIAL SAFETY DATA SHEET

according to 2001/58 EC, EC 1907/2006, EC 1272/2008

Printing: 18-02-2014 date of update: 18-02-2014 Data sheet: B1100in Rev. n. 1

1. Identification of product and company

1.1 Product identifier

Product name: Toner cartridge black (k) MF3300 / MF3800
Product code: B1100

1.2 Relevant identified uses of substance or mixture and use advised against

Product description: Toner cartridge black (k) MF3300 / MF3800

1.3 Details of the supplier of the safety data sheet

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

1.4 Emergency telephone number

For emergency: Center-Hospital Niguarda (Milano)
0039 (0)2 66101029

The logo for Olivetti, featuring the word "olivetti" in a bold, blue, sans-serif font.

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2. Hazard identification

2.1 Classification of the substance or mixture

The product is not classified as hazardous pursuant to the provisions set forth in Directives 1999/45/EC, but may have potentially effects on human health.

2.2 Label elements

Not required.

Simbol:

Not required

Phrases-R/H:

Not required

Phrase-S:

No required

Special marking:

Not required

2.3 Other hazards

None

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3. Composition and information on ingredients

3.1 Substances

Information not relevant.

3.2 Mixtures

Substance [] Prepared [X]

Nome Chimico	% w/w	Numero CAS	EINECS numero
Styrene acrylic resin	60-70	+++	-
Ferrite Iron oxide	5-15	1309-37-1	-
Ferrite Manganese oxide	1-10	1344-43-0	-
Wax	1-10	+++	-
Carbon black	1-10	1333-86-4	-
Wax-2	1-10	+++	-
Amorphous silica	1-10	7631-86-9	-
Titanium dioxide	<1	13463-67-7	-

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4 First aid measures

4.1 Description of first aid measures

The following are the first aid measures related to substance contained in the product

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

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

For symptoms and effects caused by the contained substances see chapter 11

4.3 Identification of any need to consult your doctor

Follow your doctor's directions in case of eyes irritation and if symptoms occur.

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5 Fire fighting measures

5.1. Extinguishing media

Extinguishing media: CO₂, water spray, foam and dry chemical. Avoid full water jet.

Special procedures to fight fire: Wear an autorespirator and protective media.

5.2 Special hazards arising from the substance or mixture contained in the product

Do not breathe combustion products. If dispersed in air, like most finely divided organic powders, may form an explosive mixture.

5.3 Advice for fire-fighters

General

Information

Always wear full fire prevention. Collect extinguishing water must not be discharged into drains. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

Equipment

Hardhat with visor, fireproof clothing, a depressurised mask with self-contained breathing apparatus o SCBA).

6 Accidental release measures

6.1 Caution personal protective equipment and emergency procedures

Below are some protective measures in case of accidental release of the substance contained in the product

Personal protection:

Avoid inhalation, ingestion, eye and skin contact in case of accidental developer release.

Clean-up method:

Wear personal protective equipment. 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.

6.2 Environmental Precautions

Do not release into drains and surface water.

6.3 Methods and materials for containment and cleaning up not applicable

Not relevant.



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7 Handling and storage

7.1 Precautions for safe handling

Handling: Do not breathe dust. Avoid contact with eyes. Keep away from the reach of children. Wash hands after handling.

7.2 Conditions for safe storage including any incompatibilities

Keep container closed and store in a cool and dry place.
Keep out of reach of children.

8 Exposure controls and personal protection

8.1 Control parameters

Reference data:

ACGIH TLV(USA): Inhalable particles 10 mg/m³, Respirable particles 3 mg/m³

OSHA PEL(USA): Total dust 15 mg/m³, Respirable fraction 5 mg/m³

DFG-MAK(GER): Inhalable fraction 4 mg/m³, Respirable fraction 1.5 mg/m³

Worksafe-TWA(Austl.): 10 mg/m³

8.2 Exposure controls

Measurements masks: Respiratory protection, eye protection, hand protection, skin and body protection are not required under normal use. For use other than in normal operating procedures (such as in the event of large spill), goggles and respirators may be required.

Personal protection: Not required under normal use. For use other than in normal operating procedures (such as in the event of large spill), goggles and respirators may be required.

Ventilation: Not required under normal use.

Exposure Limits: Not applicable

Prolonged inhalation of excessive dust may cause lung damage. Use of this product as intended does not result in prolonged inhalation of excessive toner dust.

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9 Physical and chemical properties

9.1 Information on basic physical and chemical

Appearance:	Solid, powder, color black
Odour:	Almost odorless
pH:	Not applicable
Boiling point:	Not applicable
Melting point:	Not available
Flash point:	Not applicable
Autoignition point:	Not applicable
Explosive properties:	Not available
Comburent properties:	Not applicable
Vapour pressure:	Not applicable
Specific Gravity	1.2
Viscosity @ 25 °C	Not available
Water solubility:	Insoluble
Solubility in:	Not available

10 Stability and reactivity

10.1 Reactivity

Avoid oxidizing materials.

10.2 Chemical stability

Stable except above 200C(392F).

10.3 Possibility of hazardous reactions

Dust explosion, like most finely divided organic powders.

10.4 Conditions to avoid

Electric discharge, throwing into fire.

10.5 Incompatible materials

Oxidizing materials

10.6 Hazardous decomposition products

CO, CO₂, NO_x and smoke.

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11 Toxicological information

It is advisable to operate in compliance with the rules of good industrial hygiene.

11.1 Toxicological Information

Acute oral toxicity: (rat)LD₅₀>2000mg/kg (based on data for other products with similar ingredients).

Acute dermal toxicity: LD₅₀ = No data available.

Acute inhalation toxicity: (rat)LC₅₀(4hr)>5,13 mg/l (based on data for other products with similar ingredients). (This was the highest attainable concentration.).

Eye irritation: Practically None irritant (rabbit) (based on data for other products with similar ingredients).

Skin irritation: None irritant (rabbit) (based on data for other products with similar ingredients).

Skin sensitisation: Non-sensitiser (mouse) (based on data for other Products with similar ingredients).

Mutagenicity:

Ames Test is Negative (based on data for other products with similar ingredients).

Teratogenicity: No data available

Carcinogenicity

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.

The IARC reevaluated titanium dioxide as a Group 2B carcinogen (possible human carcinogen). In animal chronic inhalation studies, the tumor formulation observed in only rats with animal chronic inhalation study are 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, dose not result in inhalation of excessive dust. Epidemiological study to date have not revealed any evidence of the relation between exposure to titanium dioxide and diseases of the respiratory tract beyond general effects of dust.

Chronic effects:

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.

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12 Ecological information

No data available.

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

Not required.

15 Regulatory information

All chemical substances in this product comply with all applicable rules or order under TSCA.

This product contains no chemical substances subject to California Proposition 65.

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16 Other information

This sheet contains information required as per applicable European Directives 88/379/EEC, 92/32/EEC, 91/155EEC, CE 1907/2006, 2001/58EC and following upgrades.

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.

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

Such information is based on data considered to be as accurate as possible at the date of issue.

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

To 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.

HMIS Rating:

The National Paint and Coating Association(USA): Health: 1 Flammability: 1 Reactivity: 0

Recommended Uses: Toner for Electrophotographic Equipment

Abbreviation

ACGIH:	American Conference of Governmental Industrial Hygienists
PEL	Permissible Exposure Limit
OSHA	Occupational Safety and Health Administration
TLV	Threshold Limit Value
TWA	Time Weighted Average
MAK:	MAK (Maximale Arbeitsplatzkonzentrationem) under Deutsche Forschungsgemeinschaft
IARC:	International Agency for Research on Cancer
NTP:	National Toxicology Program
UN:	United Nations
TSCA:	Toxic Substances Control Act(USA)
EPA:	Environmental Protection Agency (Integrated Risk Information System) (USA)
Proposition 65	California, Safe Drinking Water and Toxic Enforcement Act of 1986