

Material Safety Data Sheet
In according to the Regulation (CE) n. 1907/2006 REACH
Issue date: 18/10/04 - Data sheet B0488 in Rev. n. 2 - Rev. Date: 03/12/2018

1. Identification of the Product and of the Company

Product name:	Toner d-Copia 250MF
Code number:	B0488
Product description:	Black toner for electrophotographic printing systems.
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.

LABEL ELEMENTS

Precautionary pictograms	---
Signal word:	---
Hazard Statement:	---
Precautionary Statements	---

OTHER HAZARDS

Assessment of PBT/vPvB	No data available.
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3. Composition/information on ingredients

Chemical name	Weight %	CAS number
Styrene acrylic resin	50-60	+++
Magnetite	40-50	+++
Wax	1-5	+++
Titanium dioxide	<1	13463-67-7

+++ : Supplier's confidential information

Chemical Name: Titanium dioxide

CAS No.: 13463-67-7 EINECS-No.: 236-675-5

IARC Monographs: Group 2B

4. First – aid measures

Ingestion: Rinse out the mouth. Drink one or two glasses of water to dilute.

Inhalation: Remove from exposure to fresh air and gargle with plenty of water. Consult a doctor in case of such symptoms as coughing.

Eye contact: Flush with water immediately and see a doctor if irritating.

Skin contact: Wash with soap and water.

Most important symptoms and effects, both acute and delayed

Ingestion: Use of this product as intended does not result in ingestion.

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

Eye contact: May cause transient eye irritation.

Skin contact: Unlikely to cause skin irritation.

Indication of any immediate medical attention and special treatment needed

No additional information available.



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5. Fire – fighting measures

Suitable Extinguishing Media:	CO2, water spray, foam and dry chemical.
Unsuitable Extinguishing Media:	None specified.
Hazardous combustion products:	Carbon dioxide. Carbon monoxide.
Fire-fighters procedures:	Pay attention not to blow away dust. Drain water off around and decrease the atmosphere temperature to extinguish the fire.
Protective equipment for firefighters:	None specified.

6. Accidental release measures

Personal precautions:	Avoid inhalation, ingestion, eye and skin contact in case of accidental release. Avoid formation of dust. Provide adequate ventilation.
Environmental precautions:	Do not allow to enter into surface water or drains.
Methods for Cleaning-up:	Gather the released powder not to blow away and wipe up with a wet cloth.

7. Handling and storage

Handling:	Do not attempt to force open or destroy the toner container or unit. See installation guide of this product.
Storage:	Keep the toner container or unit tightly closed and store in a cool, dry and dark place keeping away from fire. Keep out of the reach of children.
Specific end use (s)	No additional information available.



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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.
Control Parameters (As total dust) ACGIH-TLV-TWA (USA):	10mg/m3 inhalable particles, 3 mg/m3 respirable particles.
Control Parameters (As Ingredients: Titanium dioxide) ACGIH-TLV-TWA (USA):	10mg/m3
Personal Protective Equipment:	Respiratory protection, eye protection, hand protection, skin and body protection are not required under normal intended use.
Environmental exposure controls:	No additional information available.

9. Physical and chemical properties

Physical state:	Solid
Form:	Fine Powder
Color:	Black
pH	Not applicable
Odor:	Odourless
Boiling point (°C)	Not applicable
Melting point (°C / [F]):	140°C
Flash Point (°C):	Not applicable
Auto-Ignition Temperature (°C)	No data available
Vapor Pressure:	Not applicable
Vapor density:	Not applicable
Specific Gravity:	1,5 -2,0 g/cm3
Solubility:	Almost Insoluble in water
Partition Coefficient, n-Octanol/Water:	Not applicable
Decomposition temperature:	Not applicable



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10. Stability and reactivity

Stability:	This product is stable under normal conditions of use and storage.
Reactivity:	No data available.
Conditions to avoid:	Electric discharge, throwing into fire.
Materials to Avoid:	Oxidizing materials.
Hazardous decomposition products:	Hazardous decomposition products are not to be produced.

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11. Toxicological information

Acute Toxicity:

Ingestion(oral), LD50(mg/kg): >2500 (Rat)
Dermal, LD50(mg/kg): >2000 (Rat)
Inhalation, LC50(mg/l): >5.13 (Rat,4hour)
Eye irritation: mild irritant (Rabbit)
Skin irritation: non irritant (Rabbit)

Skin sensitizer: Non sensitizer (mouse)

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:

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.

Mutagenicity: Negative(AMES test)

Teratogenicity: no data available



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12. Ecological information

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

Mobility in soil:	No data available.
Persistence and degradability:	No data available.
Bioaccumulative potential:	No data available.
Results of PBT and vPvB assessment:	No data available.
Other adverse effects:	No additional information 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

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.



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16. Other information

This Material Safety Data Sheet was prepared in according to the Regulation (CE) n. 1907/2006 REACH, Regulation EC n°1272/2008 and Regulation 830/2015.

Changes from the previous version:

- update section n. 1-2-3-4-5-6-7-8-9-10-11

Explanation of term: IARC 2B means "possible human carcinogen".

Abbreviations:

ACGIH-TWA: Threshold Limit Value of American Conference of Government Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

H-Code: Hazard Code

IARC: International Agency for Research on Cancer

OEL: Occupational exposure limit

OSHA: Occupational Safety and Health Administration

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Revision Information: Regular revision on revised date.

Literature References:

ANSI Z400.1-1993

ISO 11014-1

Commission Directive 91/155/EEC

IARC(2010): IARC monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Vol. 93, Carbon Black, Titanium Dioxide, and Talc, Lyon, pp. 43-191

H.Muhle, B.Bellmann, O.Creutzenberg, C.Dasenbrock, H.Ernst, R.Kilpper, J.C.MacKenzie, P.Morrow, U.Mohr, S.Takenaka, and R.Mermelstein(1991)

Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats. Fundamental and Applied Toxicology 17, pp.280-299.

NIOSH CURRENT INTELLIGENCE BULLETIN :Evaluation of Health Hazard and Recommendation for Occupational Exposure to Titanium Dioxide :DRAFT

Restrictions:

The above information is believed to be accurate and represents the best information currently available to Our Corporation. However, Our Corporation makes no warranty with respect to such information, and Our Corporation assumes no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.

