Material Safety Data Sheet

According to 91/155/EEC and following modifications
Issue date: 02/11/04 update: 06/04/05
Data sheet B0480in Rev. n. 1

1. Identification of the substance/preparation and of the company/undertaking

Product name:	**TONER BLACK MF 22**
Code number:	**B0480**
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 522710 Fax 0039 (0)125 522711 e-mail : supplies@olivetti.com
For emergency:	Centro Antiveleni-Ospedale Niguarda (Milano) 0039 (0)2 66101029

2. Composition / information on ingredients

Substance/ preparation: preparation

Chemical name*	% weight	CAS number	EINECS number	EU classification
Styrene acrylic resin	80-90	Confidential**	-	Not listed
Wax	1-10	Confidential**	-	Not listed
Carbon Black	1-10	1333-86-4	215-609-9	Not listed
Titanium compound	1-10	Confidential**	-	Not listed
Amorphous silica	<1	7631-86-9	231-545-4	Not listed
See section 16 for the full text of the R phases declared above				

*Occupational Exposure Limit(s), is available, are listed in section 8
**Supplier's confidential information

3. Hazards identification

The preparation has not been classified as a dangerous according to directive 1999/45/EC and its amendments.

Skin contact:	Unlikely to cause skin irritation.
Ingestion:	Ingestion is not applicable route of entry for intended use.
Inhalation:	Prolonged inhalation of excessive dusts may cause lung damage. Use of this product, as intended, does not result in inhalation of excessive dusts.
Eye contact:	May cause eye irritation.
Environment Hazards:	No data are available on the adverse effects of this product on the environment.

4. First – aid measures

First-aid measures:

Inhalation:	If inhaled, remove to fresh air and gargle with plenty of water. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	Rinse out the mouth. Drink one or two glasses of water to dilute. Seek medical treatment if necessary.
Skin contact:	Wash with soap and water. Get medical attention if irritation develops.
Eye contact:	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

5. Fire – fighting measures

Extinguishing media

Extinguishing Media:	Water spry, CO_2 , foam and dry chemical. Do not use water jet.
Hazardous thermal decomposition products:	These product are carbon oxides (CO_2,CO), NO_x, and smoke.
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.

6. Accidental release measures

Personal precautions:	Avoid inhalation, ingestion, eye and skin contact in case of accidental toner release.
Environmental precautions and clean-up methods:	No special precaution. Do not discharge into drains, rivers or the environment, dispose of waste toner in accordance with local requirements. Slowly sweep the material into a bag or other sealed container. Clean remainder with a damp cloth or vacuum cleaner. If a vacuum is used, it must be equipped with high efficiency particulate air filter and the motor must be rated as dust explosion-proof.

olivetti

7. Handling and storage

Handling Keep away from heat. Keep away from sources of ignition. Do not ingest. Do not breathe dust. Avoid contact with eyes.

Storage: Keep container tightly closed and store in a cool, dry and well-ventilated area.
Keep out of reach of children.

Packaging materials
Recommended use Use original container.

8. Exposure controls/personal protection

Ventilation: Ventilation is not required under normal use,

Hygiene measures: Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.

Occupational Exposure limits ACGIH:
10 mg/m^3 TLV-TWA particulates not otherwise specified (Inhalable fraction).
3 mg/m^3 TLV-TWA particulates not otherwise specified (Respirable fraction).
3,5 mg/m^3 TLV-TWA Carbon Black.
10 mg/m^3 TLV-TWA titanium dioxide.
10 mg/m^3 TLV-TWA silica, amorphous (Inhalable fraction)
3 mg/m^3 TLV-TWA silica, amorphous (Respirable fraction).

Personal protective equipment

Not necessary for the normal use. In case of accidental dispersion used respiratory protection, eye protection, hand protection.

9. Physical and chemical properties

Physical state:	Solid (fine powder)
Color:	Black
pH	Not applicable
Odor:	Almost odorless
Melting point:	ca. 125°C
Explosive properties:	No data available.
Specific Gravity:	1.2
Solubility:	Insoluble in water.

olivetti

10. Stability and reactivity

Stability:	The product is stable under normal use.
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:	These product are carbon oxides (CO_2,CO), NO_x, and smoke.

11. Toxicological information

Acute toxicity:	
Acute toxicity oral (LD_{50}):	>2000 mg/kg (rat)*
Acute toxicity dermal (LD_{50}):	Not available.
Acute toxicity inhalation (LC_{50}):	>5.14 mg/l. (rat, 4 hour)* (This was the highest attainable concentration.)
Eye irritation:	No irritant (rabbit)*.
Skin irritation:	No irritant (rabbit)*.
Skin sensitizer:	Non sensitizer (Guinea pig) *
Chronic Toxicity or Long Term Toxicity:	Prolonged inhalation of excessive dust may cause lung damage. Use of this product, as intended, does not result in inhalation of excessive dust.
Carcinogenicity:	In 1996 the IARC re-evaluated carbon black as a Group 2B.
Mutagenicity (Ames test):	Negative*

* Based on data for other products with similar ingredients.

12. Ecological information

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

13. Disposal considerations

Dispose in according to 75/442/CEE and following modifications (91/156/CEE, 91/692/CEE, 96/59/CE and 96/350/CE) and in according to:

- Directive 91/689/CEE dangerous waste
- Resolution 2000/532/CE and following modifications about institution of a new community waste's list
- Directive 94/62/CE about packages and package's waste.

14. Transport information

No special precaution.

15. Regulatory information

EU regulations

Classification and labelling have been performed according to EU directives 67/548/EEC, 1999/45/EC including amendments.

Symbol and Indication : Not required.
R-Phrase : Not required.
S-Phrase : Not required.

16. Other information

This Material Safety Data Sheet was prepared in compliance with EU Directive 91/155/EEC including amendments.
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.
<Abbreviation>

IARC:	International Agency for Research on Cancer.
LD_{50}:	Lethal Dose 50: is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.
LC_{50}:	Lethal concentration 50: the concentration of the chemical in air that kills 50% of the test animals in a given time (usually four hours) is the LC50 value.
ACGIH:	American Conference of Governmental Industrial Hygienists.
EINECS	European Inventory of Existing Commercial Substances.
CAS	Chemical Abstract Service.

olivetti