Material Safety Data Sheet

In accordino to the Regulation (CE) n. 1907/2006 REACH

Issue date: 07/04/2009 data Rev. Date: 07/04/2009

Data Sheet B0812in Rev. n. 0

1. Identification of the product and of the Company

Product Name:	**Toner Cartridge - Capacity 20K PGL - 2045**
Product Code:	**B0812**
Product Description:	Black toner
Company Details:	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 (Milan) 0039 (0)2 66101029

2. Hazards Identification

Most important Hazards:	None
Specific Hazards:	None
Other information on Hazards:	Potential health effect
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
Skin contact	Unlikely to cause skin irritation

3. Composition/information on ingredients

Substance or preparation; Preparation Ingredients

Chemical name (Common name)	CAS number	Weight %
Styrene acrylate copolymer – 1	–	50 – 60
Magnetite	–	40 – 50
Styrene acrylate copolymer – 2	–	1 – 5
Wax	–	1 – 5

4. First aid measures

Inhalation:	Remove from exposure to fresh air and gargle with plenty of water. Consult a doctor in case of such a symptoms as coughing
Skin Contact:	Wash with soap and water.
Eye Contact:	Flush with water immediately and see a doctor if irritating
Ingestion:	Rinse out the mouth. Drink one or two glasses of water to dilute. Seek medical treatment if necessary

5. Fire fighting measures

Extinguishing Media	Water (Sprinkle with Water), Foam, Powder, CO2 or Dry Chemical Extinguisher
Fire – Fighting Procedure	Pay attention not to blow away toner powder. Drain water off around and decrease the atmosphere temperature to extinguish the fire.

6. Accidental release measures

In case of dispersion of large amount of product take the following precautions:

Personal precautions:	Avoid inhalation, ingestion, eye and skin contact in case of accidental toner release
Environmental precautions:	No special precaution
Method for cleaning up:	Gather the released toner not to blow away and wipe up with a wet cloth

7. Handling and storage

Handling:	Never open the toner container
Storage:	Keep the toner container tightly closed and store in a cool, dry and dark place keeping away from fire. Keep away from children

8. Exposure controls/personal protection

Control parameters <Reference Data>

ACGIH TLV (2000)	Total Dust 10 mg/m^3
OSHA PEL (2006)	Total Dust 15 mg/m^3
Protective Equipment:	Respiratory protection, eye protection, hand protection, skin and body protection are not required under normal use
Ventilation:	Ventilation is not required under normal use

9. Phisical and chemical properties

9.1 General information

Physical state:	Solid
Form:	Fine powder
Color:	Black
Odor:	Odorless

9.2 Important health, safety and environmental information

pH	N.A.
Melting point	140° C
Explosion properties	Dust explosion is improbable under normal use Experimental explosiveness of toner is classified into the same rank such kind of powder as flour, dry milk and resin powder according to the pressure rising speed
Density	1.5 – 2.0 g/cm^3
Solubility	Almost insolubile in water

10. Stability and reactivity

Stability/Reactivity:	Stable under normal use
Hazardous Decomposition products:	None

11. Toxilogical Information

Acute oral toxicity	(rat) LD_{50}>2,500 mg/kg (Estimated from other containing same materials)
Acute dermal toxicity	(rat) LD_{50}>2,000 mg/kg (Estimated from other containing same materials)
Acute inhalation toxicity	(rat) LC_{50} (4hr)>5.13 mg/l (Estimated from other containing same materials)
Acute eye irritation	(rabbit) Mild irritant (Estimated from other containing same materials)
Acute skin irritation	(rabbit) Non – irritant (Estimated from other containing same materials)
Skin sensitization	(mouse) Non – Sensitiser (Estimated from other containing same materials)
Mutagenicity	Ames test is Negative
Reproductive Toxicity	No reproductive toxicant, according to MAK, California Proposition 65, TRGS905 and EU Directive (67/548/EEC).
Carcinogenicity	No carcinogen or potential carcinogen, according to IARC, Japan Association on Industrial Health, ACGIH, EPA, OSHA, NTA, ILO, MAK, California Proposition 65, TRGS 905 and Directive (67/548/EEC).
Chronic effects	In study in rats by chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of the rats in the concentration (16 mg/m^3) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animal in the middle (4 mg/m^3) exposure group. But not pulmonary change was reported in the lowest (1 mg/m^3) exposure group, the most relevant level to potential human exposures.

12. Ecological information

No data available

13. Disposal Consideration

Do not incinerate toner and toner containers.
Dangerous sparks may cause burn.
Any disposal practice should be done under conditions which meet local, state and federal laws and regulations relating to waste (contact local or state environmental agency for specific rules).

14. Transport information

UN No:	None
UN Shipping Name:	None
UN Classification:	None
UN Packing Group:	None
Special Precautions:	None

15. Regulatory Information

EU Information

Label information according to the Directives 67/548/EEC and 199/45/EEC.

Symbol and Indication:	Not required
R – Phrase:	Not required
S – Phrase:	Not required
Special markings:	Not required
Hazardous ingredients for labelling:	None

US Information

All components in this product comply with order under TSCA.

16. Other information

To the 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.

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 Arbeitsplatzkonzentrationen) under Deutsche Forschungsgemeinschaft
TRGS: Tecnische Regeln Fur Gefahrstoffe (Deutsche)
EPA: Environmental Protection Agency (USA)
NTP: National Toxicology Program
ILO: International Labour Office
UN: Nnited Nations
TSCA: Toxic Substances Control Act(USA)

Reference

• ISO 11014-1 Safety data sheet for chemical products
• Commission Directive 91/155/EEC and 2001/58/EC
• Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats
H.Muhle et.al
Fundamental and Applied Toxicology 17.280-299(1991)
• Lung Clearance and Retention of Toner, Utilizing a Tracer Technique,
during Chronic Inhalation Exposure in Rats
B.Bellmann
Fundamental and Applied Toxicology 17.300-313(1991)