Material Safety Data Sheet

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

Issue date: 24/11/2010 data Rev. Date: 24/11/2010

Data Sheet B0947en Rev. n. 0

1. Identification of the Product and of the Company

Product name:	**Cyan Toner MF2603/2604 (5K)**
Code number:	**B0947**
Product description:	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 Directive 67/548/CEE, 1999/45/CE and 2001/60/CE and further modifications.

Other information on hazards

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.
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)

3. Composition/information on ingredients

Substance [ ] Preparation [X]

Major ingredients:

Chemical name	Weight %	CAS number	EINECS number
Polyester resin 1	70-80	+++	+++
Polyester resin 1	5-10	+++	+++
Organic Pigment	1-5	+++	+++
Styrene acrylate copolymer	1-5	+++	+++
Amorphous Silica	1-5	7631-86-9	231-545-4

+++: Supplier's confidential information

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 water and mild soap.

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: CO_2, Water (Sprinkle with water), Foam, Powder 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

Personal precautions: Avoid inhalation, ingestion, eye and skin contact in case of accidental toner release.

Environmental precautions: No special precaution.

Methods for Cleaning-up: Gather the released toner not to blowing away and wipe up with 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

Engineer Measures

Ventilation: Ventilator is not required under normal use.

Control Parameters

ACGIH-TLV (2008)-TWA: Inhalable fraction 10 mg/m^3, Respirable fraction 3 mg/m^3

OSHA-PEL (2006)-TWA: Total Dust 15 mg/m^3, Respirable fraction 5 mg/m^3
Silica 80 mg/m^3/%SiO_2

Protective Equipment: Respiratory protection, eye protection, hand protection, skin and body protection are not required under normal use.

Hygiene measures: Wash hands after handling.

9. Physical and chemical properties

Physical state:	Solid
Form:	Fine Powder
Color:	Cyan
Odour:	Odorless
pH	Not applicable
Melting Point:	100-120°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:	1.2-1.4 g/cm^3
Solubility:	Almost insoluble in water

10. Stability and reactivity

Stability/Reactivity: Stable under normal use.

Hazardous Decomposition Products: None.

11. Toxicological information

Acute oral toxicity:	(rat) LD_{50}>2,000 mg/kg (Estimated from other products containing same materials)
Acute dermal toxicity:	(rat) LD_{50}>2,000 mg/kg (Estimated from other products containing same materials)
Acute inhalation toxicity:	(rat) LC_{50} (4hr)>4.98 mg/l (Estimated from other products containing same materials)
Acute eye irritation:	(rabbit) Minimal irritant (Estimated from other products containing same materials)
Acute skin irritation:	(rabbit) Mild irritant (Estimated from other products containing same materials)
Skin sensitization:	(mouse) Non-Sensitiser (Estimated from other products containing same materials)
Mutagenicity:	Ames test is Negative (Estimated from other products containing same materials)
Reproductive Toxicity:	No reproductive toxicant, according to MAK, California Proposition 65, TRGS905 and EU Directive (67/548/EEC)
Carcinogenicity:	No carcinogen or potential carcinogen (except carbon black), according to IARC, Japan Association on Industrial Health, ACGIH, EPA, OSHA, NTP, ILO, MAK, California Proposition 65, TRGS905 and EU Directive (67/548/EEC)
Chronic effects:	In a 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 high 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 no pulmonary change was reported in the lowest (1 mg/m^3) exposure group, the most relevant level to potential human exposures.
Other information:	None

12. Ecological information

No data available.

13. Disposal considerations

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 Shipping name, UN Classification, UN Packing Group, Special Precautions : None

15. Regulatory information

EU Information

Information on the label (1999/45/EC and 67/548/EEC): Not required

US Information

All components in this product comply with order under TSCA

16. Other information

This Material Safety Data Sheet was prepared in according to the Regulation (CE) n. 1907/2006 REACh.
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>

ACGIH:	American Conference of Governamental 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:	Technische Regeln fur Gefahrstoffe (Deutsche)
IARC:	International Agency for Reserch on Cancer
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.la Fundamental and Applied Toxicology 17.280.299 (1991)
* Lung Clereance and Retention of Toner, Utilizing a Tracer Technique, during Chronic Inhalation Exposure in Rats – B.Bellmann Fundamental and Applied Toxicology 17.300-313(1991)