Safety Data Sheet (ISO form)

Date Prepared 2006/09/12

1. Product and Company Identification

Product Name RICOH TONER MP 4500E Company Name : Ricoh Company,Ltd. Department : Address : Telephone Number : Emergency Telephone Number : Telefax Number :

2.Composition/Information on Ingredients

Substance or Preparation Preparation

Chemical Nature

Ingredients	CAS.No.	Contents(%)
Polyester Resin	Confidential	60-90
Wax	8015-86-9	1-20
Carbon Black	1333-86-4	1-20

3. Hazards Identification (Most Important Hazard)

Adverse Human Health Effects

Not applicable in normal use.

Carcinogenicity

Carbon Black was reclassified as a Group 2B by IARC in 1996 based on the result of only the inhalation study in rats. However there was not observed the incidence of tumors on the test results on dermal or oral studies. Also 2-years inhalation study using a typical toner containing carbon black showed no association between toner exposure and animal tumors.

Environmental Effects

Not applicable in normal use.

Physical and Chemical Hazards

Not applicable in normal use.

The Classification of The Chemical Product

Not applicable

4.First-Aid Measures

Inhalation

Gargle with plenty of water and move to place where air is fresh. If necessary, seek medical advice.

Skin Contact

Wash thoroughly with soapy water.

Eye Contact

Try to remove with eye drops or flush with water.

Ingestion

Dilute stomach contents with plenty of water. If necessary, seek medical advice.

5.Fire-Fighting Measures

Extinguishing Media

CO2, dry chemicals, foam or water.

Specific Method

Sprinkling water or use extinguisher in generally.

6.Accidental Release Measures

Personal Precautions Do not breath dust as possible.

Environment Precautions Do not exposure to sewers and watercourses.

Methods for Cleaning Up

If spilled, sweep up or sucks up by vacuum cleaner which a safety device is put for dust explosion .

7.Handling and Storage

Handling(technical measures,precautions,safe handling material) Do not handle in areas where wind blows. Flying powders are likely to contact with eyes. Do not breath dust as possible.

Storage(technical measures,storage conditions,packaging material) Keep out of reach of children. Keep at a temperature not exceeding 35 ?in quality. Avoid direct sunlight in quality.

8. Exposure Controls/Personal Protection

Respiratory Protections

Unnecessary in an usual use condition.

Hand Protection

Unnecessary in an usual use condition.

Eye Protection Unnecessary in an usual use condition.

Skin and Body Protection

Unnecessary in an usual use condition.

9. Physical and Chemical Properties

Appearance Form : Powder Color : Black Odour : Slightly plastic oder

Information : not applicable Measuring Temp.(degrees centigrade) : pН Boiling Point(degrees centigrade) : not applicable Flash Point(degrees centigrade) : not applicable Explosion Properties (degrees centigrade) : This product is considered a nonexplosive material under normal use condition. Vapor Pressure(Pa) : not applicable Measuring Temp.(degrees centigrade): ? Vapor Density(AIR=1) : not applicable Density (g/cm3) : approx.1.2 Measuring Temp.(degrees centigrade): 25 Solubility Water Solubility(g/L) : Insoluble Water Solubility Measuring Temp.(degrees centigrade) -

Other Solvent Solubility (g/L) : Slightly soluble Other Solvent Solubility (g/L) : Slightly soluble Other Solvent Solubility Measuring Temp.(degrees centigrade) : -

Octanol/Water Partition Coefficient not known

10.Stability and Reactivity

Conditions to Avoid

Not applicable in normal use.

Materials to Avoid Not applicable in normal use.

Hazardous Decomposition Products Decomposition product will not occur

11.Toxicological Information

Acute Toxicity Acute Oral Toxicity (LD50) : 5000mg/kg or over (Rat) (Based on other product test results of similar ingredients.) Acute Dermal Toxicity : not available Acute Inhalation Toxicity : not available Sensitization Local effects Acute Skin Irritation(PII): non-irritant(Based on other product test results of similar ingredients.) : not available(Ingredients are not classified as dangerous according to Acute Eye Irritation Directive 67/548/EEC.) Sensitization Acute Allergenic Effects : non-skinsensitive (Based on other product test results of similar ingredients.) Specific Effects Carcinogenicity :

In 1996 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, 2-years cancer bioassay using a typical toner preparation containing carbon black did not demonstrate an association between toner exposure and tumor development in rats.

Mutagenicity : negative(Ames test)

Effects on The Reproductive System : Not include substance which listed on hazardous characteristics of reproductive toxicity.

Teratogenic : Not available.

12. Ecological Information

Persistence/Degradability : not known

Bioaccumulation Not known in bioaccumulation.

Ecotoxicity

Acute Toxicity for Fish (LD50)	: Not classified as toxic (EU Directive 1999/45/EC) (mg/kg/96hr)
Acute Toxicity for Daphnia (EC50)	: Not classified as toxic (EU Directive 1999/45/EC) (mg/kg/48hr)
Algae Inhibition Test (IC50)	: Not classified as toxic (EU Directive 1999/45/EC) (mg/kg/72hr)

13. Disposal Consideration

Recommended Methods for Safe Environmentally Preferred Disposal

(waste from residues/contaminated packaging) Used toner should be disposed in an environmentally appropriate manner and accordance with governmental regulations.

Product Name : RICOH TONER MP 4500E(User : Tim Taylor Date : 17/07/2008)

14. Transport Information

International Regulations Land Transport RID/ADR : not applicable DOT 49 CFR : not applicable ADNR : not applicable Sea Transport IMDG Code : not applicable Air Transport ICAO-TI/IATA-DGR : not applicable The UN Classification Number: not applicable

Specific Precautionary Transport Measures

Do not expose to direct sunlight.; Do not keep this over 35 degrees centigrade.

Specific Materials to Avoid None in the normal transport.

15.Regulation Information

Regulations Not?known

16.Other Information

References:

IARC(1996) "IARC Monograph on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Vol.65, Printing Process and Printing Inks, Carbon Black and Some Nitro Compounds", Lyon, pp149-261

H.Muhle, B.Bellman, O.Creutzenberg, C.Dasenbrock, H.Emst, 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,pp280-299

Disclaimer?

This information is furnished without warranty, express or implied, except that it is accurate to the best knowledge of RICOH COMPANY, LTD.

It relates only to the specific material designated herein, and does not relate to use in combination with any other material or process.

RICOH COMPANY, LTD assumes no legal responsibility for use or reliance upon ?this information.