# Safety Data Sheet (ISO form)

Date Prepared 23/08/2005

## 1. Product and Company Identification

Product Name TONER CARTRIDGE TYPE1275 BLACK

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	80-95
Carbon Black	1333-86-4	<5
Organic Pigment	Confidential	<1
Silica	Confidential	<2

## 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.

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#### **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 water, move to place in fresh air. If unsuccessful, get medical attention.

#### Skin Contact

Wash thoroughly with soap and water.

#### **Eve Contact**

Immediately wash eyes with plenty of water. If unsuccessful, get medical attention.

### Ingestion

Dilute stomach contents with several glasses of water. If unsuccessful, get medical attention.

# 5. Fire-Fighting Measures

#### Extinguishing Media

CO2, dry chemicals, foam or water.

## Specific Method

Generally by sprinkling or extinguisher.

### 6.Accidental Release Measures

#### Personal Precautions

Minimize inhalation of dust.

#### **Environment Precautions**

Keep product out of sewers and watercourses.

## Methods for Cleaning Up

If spilled, sweep up or pick up by vacuum cleaner(rated for toner extraction)

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# 7. Handling and Storage

Handling(technical measures, precautions, safe handling material)

Do not handle in areas where wind blows.

Flying powder may enter eyes.

Minimize breathing dust.

Storage(technical measures, storage conditions, packaging material)

Avoid direct sunlight.

Do not keep this over 35 degrees centigrade.

Keep out of reach of children.

# 8. Exposure Controls/Personal Protection

Respiratory Protections

None required under normal conditions of use.

Hand Protection

None required under normal conditions of use.

Eye Protection

None required under normal conditions of use.

Skin and Body Protection

None required under normal conditions of use.

# 9. Physical and Chemical Properties

Appearance Form : Powder Color : Black

Odour: Slightly plastic oder

Information

pH : not applicable Measuring Temp.(degrees centigrade) : B

Boiling Point(degrees centigrade) : not available Flash Point(degrees centigrade) : not available

Explosion Properties (degrees centigrade) : This product is considered a nonexplosive material

under normal use condition.

Vapor Pressure(Pa) : not applicable Measuring Temp.(degrees centigrade): B

Vapor Density(AIR=1) : not applicable

Density (g/cm3) : 1.2 Measuring Temp.(degrees centigrade): 20.0

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Solubility

Water Solubility(g/L) : Insoluble
Water Solubility Measuring Temp.(degrees centigrade) : B

Other Solvent name : toluene,chloroform,tetrahydrofran

Other Solvent Solubility (g/L) : slightly soluble
Other Solvent Solubility Measuring Temp.(degrees centigrade) : B

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)

: (**Rat**)

**Acute Dermal Toxicity** 

: not available

Acute Inhalation Toxicity

: not available

Sensitization

Local effects

Acute Skin Irritation(PII): not available
Acute Eye Irritation : not available

Sensitization

Acute Allergenic Effects: non-skinsensitive

#### 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 contained in This Product

Teratogenic: not aveilable

### 12. Ecological Information

Persistence/Degradability: not known

Bioaccumulation

Not known in bioaccumulation.

**Ecotoxicity** 

Acute Toxicity for Fish (LD50) : not available (mg/kg/96hr)
Acute Toxicity for Daphnia (EC50) : not available (mg/kg/48hr)
Algae Inhibition Test (IC50) : not available (mg/kg/72hr)

### 13. Disposal Consideration

Recommended Methods for Safe Environmentally Preferred Disposal (waste from residues/contaminated packaging)

Used toner should be disposed of in an environmentally appropriate manner and in accordance with governmental regulations. Do not incinerate.

### 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

Avoid direct sunlight. Do not keep this over 35 degrees centigrade.

Specific Materials to Avoid None in normal use.

# 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

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