Product Name : RICOH TONER BLACK MP W7140 (Black toner) MSDS Number : 821021

Date Prepared : 31/07/2008 Date Modified : 10/07/2017 Date : 03/10/2017



# Safety Data Sheet (ISO form)

### 1. Product and Company Identification

Product Name	:RICOH TONER BLACK MP W7140 (Black toner)
General Use	:The Image Formation of Printing Machine or Copier
MSDS Number	:821021
Company Name	:Ricoh Company,Ltd.
Department	:Safety Engineering Department, Quality Management Division
Address	:146-1 Nishisawada, Numazu-shi, Shizuoka-ken, 410-0007 Japan
Telephone Number	:055-920-1470, Japan
Telefax Number	:055-920-1479, Japan
E-mail	:msdsinfo@nts.ricoh.co.jp

### 2.Compo r egulation (EC) No 1272/2008 sition/Information on Ingredients

Substance or Preparation

Preparation

Chemical Nature

Ingredients	Chemical Formula	CAS.No.	Contents(%)
Polyester Resin	Confidential	Confidential	50-80
Styrene-acrylic Resin	Confidential	Confidential	10-40
Carbon Black	С	1333-86-4	<15
Wax	Not Identified	8015-86-9	<5
Organic Salt	Confidential	Confidential	<5

This product does not contain any of the following substances as ingredients. Cadmium, Hexavalent Chromium, Mercury, Lead, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), SVHC (substances of very high concern: published by ECHA). And if it contains any impurities, it does not exceed any of the thresholds of RoHS.

Hazardous Ingredients InformationChemical Name : Carbon BlackCAS Number: 1OSHA Z-Tables (USA): 3NTP (USA): NSymbol (EU): NDFG-MAK: 1

California Proposition 65 (USA)

: 1333-86-4 : 3.5mg/m3 : Not listed : Not listed : III 3B : Listed

EEC Number	: 215-609-9
ACGIH-TLV	: 3.5mg/m3
IARC Monographs	: Group 2B
R-Phrase (EU)	: Not listed
OELs-TWA (Australia)	: 3.0mg/m3

## 3. Hazards Identification

The Most Important Hazards Adverse Human Health Effects There are no significant hazards expected with intended use. Environmental Effects There are no significant hazards expected with intended use. Physical and Chemical Hazards There are no significant hazards expected with intended use. Specific Hazards Dust explosion (like most finely grained organic powders) Acute Inhalation Toxicity

#### Exposure to excessive amount of dust may cause physical irritation to respiratory tract.

Acute Oral Toxicity

Low acute toxicity in animal experiment.

Acute Eye Irritation

May cause slight transient irritation.

Acute Skin Irritation

May be non-irritant.

Sensitization

From test no apparent significant hazards are expected. (Only few cases reported on incidental allergy-related conjunctivities or dermatities.)

Chronic Effect

Slight pulmonary fibrosis has been reported in rats upon chronic inhalation exposure to a toner at 4mg/m3 every day for 2 years. No pulmonary change was found at 1mg/m3. These findings show that exposure to excessive amounts of powder may cause damage to lungs. However, normal use and handling of this product as intended, does not result in inhalation of excessive amounts of powder.

#### Carcinogenicity

Carbon black contained in this product is classified to Group 2B of IARC as the result of inhalation test in use of rat.

But oral/skin test does not show carcinogenicity.

The toner containing carbon black did not show carcinogenicity in chronic inhalation exposure test in use of rat.

The Classification of The Chemical Product

This preparation is not classified as dangerous according to Regulation (EC) No 1272/2008.

## 4. First-Aid Measures

#### Inhalation

Remove from exposure into fresh air and rinse mouth with water. Seek medical advice.

#### Skin Contact

Wash thoroughly with soapy water.

#### Eye Contact

Flush with a large amount of water until particles are removed. Seek medical advice.

#### Ingestion

Drink several glasses of water to dilute ingested toner. Seek medical advice.

Notes to a physician

Not applicable

## 5.Fire-Fighting Measures

Extinguishing Media

CO2, dry chemicals, foam or water.

Extinguishing Media to Avoid

#### Not applicable.

Specific Hazards

Can form explosive dust-air mixtures when finely dispersed in air.

Specific Method

No special fire protecting method is required. Sprinkling or fire extinguishers can be used.

#### Protection of Fire-fighters

Wear gloves, glasses, a mask if necessary.

### 6.Accidental Release Measures

**Personal Precautions** 

Do not breathe in dust.

**Environment Precautions** 

Do not flush into sewers or watercourses.

Methods for Cleaning Up

Fine powder may form explosive dust-air mixture.Confirm there is no source of fire and if there is a source, remove it.Sweep up spilled powder slowly and clean reminder with wet cloth.If a vacuum cleaner is used, a dust explosion-proof type must be chosen.

### 7.Handling and Storage

Handling Technical Measures/Precautions Not applicable Safe Handling Advice Do not handle in areas where there is wind or draught, this may cause dust to get into eyes. Avoid breathing in dust. Storage **Technical Measures** Not applicable Storage Conditions Keep out of reach of children. Store in dry, well-ventilated area, to maintain quality the temperature should not exceed 35degrees centigrade for a long time. Avoid direct sunlight. Packaging Material Not applicable Specific Use(s) Image formation in printing machines or copiers.

### 8.Exposure Controls/Personal Protection Technical Measures

Use adequate ventilation. None required with intended use.

Control Parameters		
USA OSHA PEL (TWA)	: 15mg/m3 (Total dust)	5.0mg/m3 (Respirable fraction)
ACGIH TLV (TWA)	: 10mg/m3 (Inhalable fraction)	3.0mg/m3 (Respirable fraction)
DFG MAK	: 4.0mg/m3 (Total dust)	1.5mg/m3 (Respirable fraction)
Personal Protection		
<b>Respiratory Protections</b>		
None required in no	ormal use. If the limit of exposure co	oncentration is exceeded, use authorised respirator.
Hand Protection		
Use vinyl or rubber	gloves if necessary.	
Eye Protection		

Put on goggles if necessary. Skin and Body Protection Wear chemical-resistant apron or other impervious clothing if necessary. Hygiene Measures Wash hands after handling.

### 9. Physical and Chemical Properties

Appearance Physical State Form Colour Odour	<ul> <li>Solid</li> <li>Powder</li> <li>Black</li> <li>Slightly plastic odour</li> </ul>	
Boiling Point (d	able ratures/Temperature Ranges at White egrees centigrade) : Not applica legrees centigrade) : (Softening	able
Flash Point (deg	Temperature (degrees centigrade) grees centigrade) erties (degrees centigrade)	<ul> <li>Not available</li> <li>Not applicable</li> <li>This product is considered a nonexplosive material under normal use.</li> </ul>

Vapor Pressure (Pa): Not applicableVapor Density(AIR=1): Not applicableDensity (g/cm3): Approx.1.2Measuring Temp (degrees centigrade) : 25

#### Solubility

Flammability	: Not flammable
Viscosity (Pa • s)	: Not applicable
Volatile (%)	: 0.2 or below

### 10. Stability and Reactivity

Stability Stable Hazardous Reaction Dust explosion, like most finely grained organic powders.

Conditions to Avoid Not applicable in normal use. Materials to Avoid Not applicable in normal use. Hazardous Decomposition Products Decomposition products will not occur.

## 11. Toxicological Information

Acute Toxicity Acute Oral Toxicity (LD50): 5000 or over [mg/kg] (Rat) Acute Dermal Toxicity : Not available Acute Inhalation Toxicity : Not available Local effects Acute Skin Irritation(PII) : Non-irritant (Rabbit) Acute Eye Irritation : Not available (Ingredients are not classified as dangerous according to Regulation (EC) No 1272/2008.) Sensitization Acute Allergenic Effects : 0 % (Marmot) Specific Effects Carcinogenicity : Carbon black contained in this product is classified to Group 2B of IARC as the result of inhalation test in use of rat. But oral/skin test does not show carcinogenicity. The toner containing carbon black did not show carcinogenicity in chronic inhalation exposure test in use of rat.

Mutagenicity : Negative (Ames test) Reproduction Toxicity : Does not contain substances listed as hazardous to reproductive health.

## 12. Ecological Information

Mobility: No data are available on any adverse effects on the environment.Persistence/Degradability: Not availableBioaccumulation: Not available

Ecotoxicity

: Not classified as toxic (Regulation (EC) No 1272/2008).mg/l/96hr
: Not classified as toxic (Regulation (EC) No 1272/2008).mg/l/48hr
: Not classified as toxic (Regulation (EC) No 1272/2008).mg/l/72hr

## 13.Disposal Consideration

General information:

Dispose of waste and residues in accordance with local authority requirements.

Disposal methods:

Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal. Confirm disposal procedures with local regulations.

Precautions:

Do not throw the toner cartridge or toner into an open flame. Hot toner may scatter and cause burns or other damage.

## 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 applicableClass: Not applicableSpecific Precautionary Transport Measures and conditionsAvoid direct sunlight in quality.

### 15.Regulatory Information

Regulat	ions
EU Inform	nation
In	formation on the label (Regulation (EC) No 1272/2008)
	Symbols & : Not required
	Indications
	R-Phrase : Not required
	S-Phrase : Not required
	Special Precautions under r egulation (EC) No 1272/2008 Annex II : Not required
R	egulation (EC) No 1907/2006 annex XVII
	This product complies with applicable rules and regulations under Regulation (EC) No 1907/2006 annex
	XVII.
30	04/2003/EC
	Not regulated
U	S Information
In	formation on the label : Not required
Т	SCA (Toxic Substances Control Act) :
	This toner complies with all applicable rules and regulations under TSCA.
S	ARA Title III
	313 Reportable Ingredients : Not regulated
С	alifornia Proposition 65: Not regulated
С	anada Information
W	/HMIS Controlled product : Not a controlled product

### 16.Other Information

NFPA Hazard Rating: National Fire Protection Agency (USA)

Health; 1, Flammability; 1, Reactivity; 0

HMIS Rating : The National Paint and Coating Association (USA)

Health ; 1, Flammability ; 1, Reactivity ; 0

Literature References : ANSI Z400.1-1993 ISO 11014-1 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, pp 280-299

IARC (2008) "IARC Monograph on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Vol.93" NIOSH CURRENT INTELLIGENCE BULLETIN "Evaluation of Health Hazard and Recommendation for Occupational Exposure to Titanium Dioxide DRAFT"

ACGIH-TLV	: Threshold Limit Values for Chemical Substances and Physical Agents and
	Biological Exposure Indices
OSHA Z-Tables	: US Department of Labor, 29CFR Part 1910, Tables Z-1, Z-2, and Z-3
NTP (USA)	: US Department of Health and Human Services National Toxicology Program Annual
	Report on Carcinogens
DFG-MAK	DFG List of MAK and BAT Value
Symbol (EC)	: Regulation (EC)No.1272/2008

3/10/2017		Ricoh Company,Ltd. 821021 RICOH TONER BLACK MP W7140 (Black toner)
91/1	55/ EEC	: EU Directive 91/155/ EEC
1272	2/2008	: Regulation (EC) No 1272/2008
CLP	• (EC)No.127	
		December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directive Regulation (EC) No 1272/2008, and amending Regulation (EC)No. 1907/2006
EC 3	304/2003	: Regulation (EC) No 304/2003 of the European Parliament and of the Council of 28
		January 2003 concerning the export and import of dangerous chemicals
WH	MIS Controll	ed product : Canada Workplace Hazardous Information System
OEL	Ls-TWA (Aus	
		Contaminants in the Occupational Environment [NOHSC: 3008 (1995)]
Abl	breviations	:
OSH	IA PEL	PEL (Permissible Exposure Limit) under Occupational Safety and Health Act
ACC	GIH-TLV	TLV (Threshold Limit Values) under American Conference of Governmental Industrial
		Hygienists
REA	АСН	(EC)No.1907/2006:Council Regulation concerning the Registration, Evaluation, Authorization
		and Restriction of Chemicals
SVH	łC	Substances of Very High Concern
ECH		The European Chemicals Agency
	G-MAK	MAK (Maximale Arbeitsplatz Konzentrationen) by Deutsche Forschungs Gemeinschaft
RoH		Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment
TW	VA	Time Weighted Average
IAF	RC	nternational Agency for Research on Cancer
NT	Р	National Toxicology Program
WH	IMIS	Workplace Hazardous Information System
	HSC	National Occupational Health and Safety Commission Act 1985
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