

Safety Data Sheet

Section 1 : Chemical Product and Company Identification

- (a) Product identifier used on the label
Product Name : [Print Cartridge Black MP CW2200](#)
- (b) Other means of identification
SDS Number : [841720](#)
- (c) Recommended use of the chemical and restrictions on use
General Use : [The Image Formation of Printing Machine](#)
- (d) Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party
Company Name : [Ricoh USA, Inc](#)
Department : [Sustainability Management Center](#)
Address : [2 Gatehall Drive, Parsippany, NJ 07054 USA](#)
- (e) Emergency phone number.
Telephone : [1-973-882-2000 \(for product information\) or](#)
Number : [1-800-336-6737 \(for emergencies\)](#)
Telefax Number : [1-973-882-3959](#)
E-mail : Environmentinfo@ricoh-usa.com

Section2 : Hazards Identification

Classification

PHYSICAL HAZARD(S)	EXPLOSIVES	Classification not possible
	FLAMMABLE GASES	Not Applicable
	FLAMMABLE AEROSOLS	Not Applicable
	OXIDIZING GASES	Not Applicable
	GASES UNDER PRESSURE	Not Applicable
	FLAMMABLE LIQUIDS	Classification not possible
	FLAMMABLE SOLIDS	Not Applicable
	SELF-REACTIVE SUBSTANCES AND MIXTURES	Classification not possible
	PYROPHORIC LIQUIDS	Classification not possible
	PYROPHORIC SOLIDS	Not Applicable
	SELF-HEATING SUBSTANCES AND MIXTURES	Classification not possible
	SUBSTANCES AND MIXTURES, WHICH ON CONTACT WITH WATER, EMIT FLAMMABLE GASES	Classification not possible
	OXIDIZING LIQUIDS	Classification not possible
	OXIDIZING SOLIDS	Not Applicable
	ORGANIC PEROXIDES	Classification not possible
CORROSIVE TO METALS	Classification not possible	
HEALTH HAZARD(S)	ACUTE TOXICITY(ORAL)	Not Classified
	ACUTE TOXICITY(DERMAL)	Classification not possible
	ACUTE TOXICITY (INHALATION - GAS)	Not Applicable
	ACUTE TOXICITY (INHALATION - VAPOUR)	Not Applicable
	ACUTE TOXICITY (INHALATION - DUST AND MIST)	Not Applicable
	SKIN CORROSION/IRRITATION	Not Classified
	SERIOUS EYE DAMAGE/EYE IRRITATION	Classification not possible
	RESPIRATORY SENSITIZER	Classification not possible
	SKIN SENSITIZER	Not Classified
	GERM CELL MUTAGENICITY	Classification not possible
	CARCINOGENICITY	Classification not possible
	TOXIC TO REPRODUCTION	Classification not possible
	TARGET ORGAN SYSTEMIC TOXICITY FOLLOWING SINGLE EXPOSURE	Classification not possible
TARGET ORGAN SYSTEMIC TOXICITY FOLLOWING REPEAT EXPOSURE	Classification not possible	
ASPIRATION HAZARD	Classification not possible	
ENVIRONMENTSL HAZARD(S)	ACUTE HAZARDS TO THE AQUATIC ENVIRONMENT	Classification not possible
	CHRONIC HAZARDS TO THE AQUATIC ENVIRONMENT	Classification not possible
	HAZARDOUS TO THE OZONE LAYER	Classification not possible

Label element

Pictogram :	
Signal word(s):	Not applicable
Hazard statement(s):	Not applicable
Precautionary statement(s)	
【Prevention】	Not applicable
【Response】	Not applicable
【Storage】	Not applicable
【Disposal】	Not applicable

Specific Hazards

[There are no significant hazards expected with intended use.](#)

Section3 : Composition, Information on Ingredients
--

Ingredients CAS No./Chemical name	Contents (%)
1333-86-4 Carbon Black	<10
56-81-5 Glycerin	10-20
Confidential Glycol 1	<10
Confidential Glycol 2	<10
7732-18-5 Water	40-60

Section4 : First Aid Measures

- (a) Necessary measures
Inhalation :
Remove from exposure into fresh air if symptoms are experienced. 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 :
Make him drink strong salt water, let him vomit. Seek medical advice.
- (b) Most important symptoms/effects, acute and delayed.
Not applicable
- (c) Indication of immediate medical attention and special treatment needed.
Immediate Medical Attention :
Immediate medical attention is not required.

Section5 : Fire Fighting Measures

- (a) Suitable (and unsuitable) extinguishing media.
Extinguishing Media to Avoid :
Not applicable.
- (b) Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products).
Specific Hazards :
Not applicable
- (c) Special protective equipment and precautions for fire-fighters.
Fire-Fighting Instructions / Specific Method :
No special fire protecting method is required. Sprinkling or fire extinguishers can be used.
Protection of Firefighters :
Wear gloves, glasses, a mask if necessary.

Section6 : Accidental Release Measures

- (a) Personal precautions, protective equipment, and emergency procedures.
Personal Precautions :
Take off dirty clothes and wash them or have them dry-cleaned before wearing again.
Environment Precautions :
Do not exposure to sewers and watercourses.
- (b) Methods and materials for containment and cleaning up.
Methods for Cleaning Up :
If spilled, wipe up with paper or cloth.

Section7 : Handling and Storage

- (a) Precautions for safe handling.
Handling :
Technical Measures/Precautions
Not applicable
Safe Handling Advice
Keep away from heat, flame or spark. Do not dismantle cartridge.
- (b) Conditions for safe storage, including any incompatibilities.
Storage :
Technical Measures
Not applicable
Storage Conditions
Keep out of reach of children.
For the sake of quality, store in dry and well-ventilated area it should not exceed 35 degrees centigrade for a long time and avoid direct sunlight.
Packaging material
Not applicable
Specific Use(s) :
Image formation in printing machines.

Section8 : Exposure Controls/Personal Protection

(a) OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH)

Threshold Limit Value (TLV), and any other exposure limit

Control Parameters

Exposure Limit Value (I)

USA OSHA PEL (TWA) : [Not applicable](#)

ACGIH TLV (TWA) : [Not applicable](#)

DFG MAK : [Not applicable](#)

Personal Protection

(b) Appropriate engineering controls.

Technical measures :

Use adequate ventilation. None required with intended use.

(c) Individual protection measures, such as personal protective equipment.

Respiratory Protections (Specify Type)

[None required in normal use.](#)

Eye Protection

[Put on goggles if necessary.](#)

Protective Gloves

[Use vinyl or rubber gloves if necessary.](#)

Protective Clothing or Equipment

[Wear chemical-resistant apron or other impervious clothing if necessary.](#)

Hygiene Measures

[Wash hands after handling.](#)

Section9 : Physical and Chemical Properties

(a) Appearance (physical state, color, etc.)

Physical state : [Liquid](#)

Form : [Liquid](#)

Colour : [Black](#)

(b) Odor : [No odor](#)

(c) Odor threshold : [Not available](#)

(d) pH : [8-10](#)

Measuring Temp (degrees centigrade) : [25](#)

(e) Melting point/freezing point : [Not applicable](#)

(degrees centigrade)

(f) Initial boiling point and boiling range : [Not available](#)

(g) Flash point : [Not applicable](#)

(h) Evaporation Rate (Butyl Acetate = 1) : [Not available](#)

(i) Flammability (solid, gas) : [Not flammable](#)

(j) Upper/lower flammability or explosive limits : Upper [Not applicable](#) Lower [Not applicable](#)

(k) Vapor Pressure (Pa) : [Not available](#)

(l) Vapor Density (AIR=1) : [Not available](#)

(m) Relative density : [Approx.1.1](#)

(n) Solubility(ies)

[Water](#) Solubility (g/L) : [Soluble](#)

(o) Partition coefficient: n-octanol/water : [Not available](#)

(p) Auto-ignition temperature : [Not applicable](#)

(q) Decomposition temperature (degrees centigrade) : [Not applicable](#)

(r) Viscosity (Pa·s) : [Approx.0.008](#) Measuring Temp (degrees centigrade) : [25](#)

Section10 : Stability and Reactivity

- (a)Reactivity
Hazardous Reaction :
There is no significant hazardous reaction expected with intended use.
- (b)Chemical stability :
Stable
- (c)Possibility of hazardous reactions :
Not available
- (d)Condition to Avoid :
Not applicable in normal use.
- (e)Incompatible materials :
Not applicable in normal use.
- (f)Hazardous decomposition products :
Decomposition products will not occur.

Section11 : Toxicological Information

- (a)Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact)
ingestion,skin,inhalation,eye contact
- (b)Symptoms related to the physical, chemical and toxicological characteristics
Not available
- (c)Delayed and immediate effects and also chronic effects from short- and long-term exposure

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) :
1.0 or below (Rabbit) (Slight irritation)

Acute Eye Irritation :
Not available (Ingredients are not classified as dangerous according to Regulation (EC) No 1272/2008.)

Sensitization

Acute Allergenic Effects :
Non-skingsensitive (Mouse) (None skin sensitization.)

Mutagenicity : Negative (Ames test)

Reproduction Toxicity : Does not contain substances listed as hazardous to reproductive health.

Teratogenic : Not available

- (d)Numerical measures of toxicity (such as acute toxicity estimates)

Not available

- (e)Whether the hazardous chemical is listed in the National Toxicology Program (NTP)

Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA.

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

This is due to the fact that rat alone showed lung tumor in the animal experiment under very high concentration.

During a normal use of this product, design of the cartridge proves it impossible to have powder carbon black released to the air.

Intake from the mouth and skin does not show carcinogenicity.

Section12 : Ecological Information

Mobility : No data are available on the adverse effect one environment.

Persistence/Degradability : Not available

Bioaccumulation : Not available

Ecotoxicity

Acute Toxicity for Fish (LC50) : Not available

Acute Toxicity for Daphnia (EC50) : Not available

Algae Inhibition Test (IC50) : Not available

Section13 : Disposal Consideration

General information:

[Dispose of waste and residues in accordance with local authority requirements.](#)

Disposal methods:

Precautions

Section14 : 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](#)

UN Number : [Not applicable](#)

Class : [Not applicable](#)

Specific Precautionary Transport Measures and Conditions

[Avoid direct sunlight in quality.; Do not keep this over 35 degrees centigrade.](#)

Section15 : Regulatory Information

Regulations

US Information

Information on the label : [Not required](#)

TSCA (Toxic Substances Control Act) :

[This product complies with all applicable rules and regulations under TSCA.](#)

SARA (Superfund Amendments and Reauthorization Act) Title III

313 Reportable Ingredients : [Not regulated](#)

California Proposition 65 : [Not regulated](#)

Canada Information

WHMIS Controlled product : [Not a controlled product](#)

EU Information

Information on the label ((EC) No.1272/2008))

Symbol & Indication : [Not required](#)

R-Phrase : [Not required](#)

S-Phrase : [Not required](#)

(EU) No.1907/2006 Annex XVII

[This product complies with applicable rules and regulations under \(EU\) No.1907/2006 Annex XII](#)

Section16 : Other Information

Explanation of Hazardous Materials Identification System [HMIS]& National Fire Protection Association [NFPA] Hazard Rating Systems:

Both the HMIS and NFPA systems use number from "0" to "4" to show the degree of hazard in an uncontrolled situation:

0=Minimum Hazard 1=Slight Hazard 2=Moderate Hazard 3=Serious Hazard 4=Severe Hazard

Colors may also be used in both systems:

Blue=Health Hazard **Red**=Fire Hazard **Yellow**=Reactivity Hazard **White**=Indicate a special hazard

HMIS will specify any Personal Protective Equipment required [PPE],

NFPA will specify OX(oxidizer), Acid(acid), ALK(Alkali), COR(Corrosive), W(use no water), xx(Radioactive).

Literature References :

ANSI Z400.1-1993

ISO 11014-1

Commission Directive 91/155/EEC

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

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 (GER) : DFG List of MAK and BAT Value

Symbol (EC) : Regulation (EC)No.1272/2008

91/155/ EEC : EU Directive 91/155/ EEC

CLP (EC)No.1272/2008 : Regulation (EC)No.1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures,amending and repealing Directive 67/548/EEC and 1999/45/EC, and amending Regulation (EC)No. 1907/2006

(EC)No.689/2008 : EU. Regulation EC No. 689/2008, Annex 1

WHMIS Controlled product : Canada Workplace Hazardous Information System

OELs-TWA (Australia) : Guidance Note on the Interpretation of Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC: 3008 (1995)]

Abbreviations :

OSHA PEL PEL (Permissible Exposure Limit) under Occupational Safety and Health Act

ACGIH-TLV TLV (Threshold Limit Values) under American Conference of Governmental Industrial Hygienists

REACH EC)No.1907/2006:Council Regulation concerning the Registration, Evaluation, Authorization and Restriction of Chemicals

SVHC Substances of Very High Concern

ECHA The European Chemicals Agency

DFG-MAK MAK (Maximale Arbeitsplatz Konzentrationen) by Deutsche Forschungs Gemeinschaft

RoHS Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment

TWA Time Weighted Average

IARC International Agency for Research on Cancer

NTP National Toxicology Program

WHMIS Workplace Hazardous Information System

NOHSC National Occupational Health and Safety Commission Act 1985

Disclaimer(S) :

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Ricoh USA, Inc

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

Ricoh USA, Inc assumes no legal responsibility for use or reliance upon this information.