Product Name: Print Cartridge Cyan SP C340A SDS Number: 407896 Date Prepared: 12/16/2015 Date Modified: 12/16/2015 Date Printed: 08/29/2016 RICOH

Safety Data Sheet

Section1: Chemical Product and Company Identification

(a) Product identifier used on the label

Product Name : Print Cartridge Cyan SP C340A (Cyan toner)

(b) Other means of identification SDS Number : 407896

(c) Recommended use of the chemical and restrictions on use

: The Image Formation of Printing Machine or Copier General Use

(d) Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Company : Ricoh USA, Inc.

Name

Department : Environmental Sustainability and Product Compliance : 5 Dedrick Place West Caldwell, NJ 07006 USA Address

(e) Emergency phone number.

: 1-973-882-2000 or 1-973-882-5218 (For product information) or Telephone

1-800-336-6737 (for emergencies) Number

Telefax Number: 1-973-882-3959

: environmentinfo@ricoh-usa.com E-mail



Product Name : Print Cartridge Cyan SP C340A SDS Number : 407896 Date Prepared : 12/16/2015 Date Modified : 12/16 2015 Date Printed : 08/29/2016

Section2: Hazards Identification

Classification

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

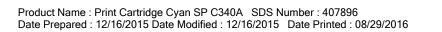


Product Name: Print Cartridge Cyan SP C340A SDS Number: 407896 Date Prepared: 12/16/2015 Date Modified: 12/16 2015 Date Printed: 08/29/2016

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
Dust explosion (like most finely grained organic powders)





Section3: Composition, Information on Ingredients

Ingredients	Contents
CAS No./Chemical name	(%)
Confidential	40-60
Polyester Resin 1	
Confidential	30-50
Polyester Resin 2	
147-14-8	1-10
Organic Pigment	
Confidential	1-5
Wax	
Confidential	1-5
Silica	
Confidential	1-5
Organic Salt	

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.

Product Name: Print Cartridge Cyan SP C340A SDS Number: 407896 Date Prepared: 2015/12/16 Date Modified: 12/16/2015 Date Printed: 08/29/2016



Section4: First Aid Measures

(a) Necessary 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.

(b) Most important symptoms/effects, acute and delayed.

Not available

(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:

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

(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:

Do not breathe in dust.

Environment Precautions:

Do not flush into sewers or watercourses.

(b) Methods and materials for containment and cleaning up.

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.

Section7: Handling and Storage

(a) Precautions for safe handling.

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.

(b) Conditions for safe storage, including any incompatibilities.

Storage:

Technical Measures

Not applicable

Storage Conditions

Keep out of reach of children.

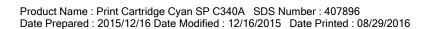
Store in dry, well-ventilated area, to maintain quality the temperature should not exceed 35degrees centigrade for a long time. Avoid direct sunlight.

Packaging material

Not applicable

Specific Use(s):

Image formation in printing machines or copiers.





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: 15mg/m3 (Total dust) 5.0mg/m3 (Respirable fraction)

(TWA)

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) 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. If the limit of exposure concentration is exceeded, use authorised

respirator.

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 : Solid Form : Powder Colour : Cyan

(b)Odor : Slightly plastic odor (c)Odor threshold : Not available (d)pH : Not applicable

(e)Melting point/freezing point : (Softening point) Approx.110

(degrees centigrade)

(f)Initial boiling point and boiling range: Not applicable

(g)Flash point : Not applicable

(h)Evaporation Rate (Butyl Acetate = : Not applicable

1)

(i)Flammability (solid, : Not flammable

gas)

limits

(j)Upper/lower flammability or explosive : Upper Not available Lower Not available

(k)Vapor Pressure (Pa) : Not applicable (I)Vapor Density (AIR=1) : Not applicable (m)Relative density : Approx.1.2

(n)Solubility(ies)

Water Solubility (g/L) : Insoluble Chloroform Solubility (g/L) : Slightly soluble (o)Partition coefficient: n-octanol/water : Not available

(p)Auto-ignition temperature : Not available

(q)Decomposition temperature (degrees : Not available

centigrade)

(r)Viscosity (Pa·s) : Not applicable



Section10: Stability and Reactivity

(a)Reactivity

Hazardous Reaction:

Dust explosion, like most finely grained organic powders.

(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

Not available

Acute Toxicity

Acute Oral Toxicity (LD50):

5000~or~over~[mg/kg]~ (Rat) (Based on other product test results of similar ingredients.) Acute Dermal Toxicity :

Not available

Acute Inhalation Toxicity:

Not available

Local effects

Acute Skin Irritation(PII):

1.0 or below (Rabbit) (Based on other product test results of similar ingredients.)

Acute Eye Irritation:

Not available (Ingredients are not classified as dangerous according to Directive 67/548/EEC.)

Sensitization

Acute Allergenic Effects:

0 % (Marmot) (Based on other product test results of similar ingredients.)

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. This product does not contain the carcinogenic substances which are listed on NTP, IARC and OSHA.

Section12: Ecological Information

No data are available on any adverse effects on the environment. Mobility

Persistence/Degradabilit : Not available

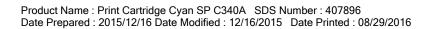
Bioaccumulation : Not available

Ecotoxicity

: Not classified as toxic (EU Directive 1999/45/EC)mg/l/96hr Acute Toxicity for Fish (LC50) : Not classified as toxic (EU Directive 1999/45/EC)mg/l/48hr Acute Toxicity for Daphnia

(EC50)

Algae Inhibition Test (IC50) : Not classified as toxic (EU Directive 1999/45/EC)mg/l/72hr





Section13: 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.

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 : Not applicable **UN Number** Class : Not applicable
Specific Precautionary Transport Measures and Conditions

Avoid direct sunlight in quality.

Section15: Regulatory Information

Regulations

US Information

Information on the label: Not required TSCA (Toxic Substances Control Act):

This toner 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 (CLP (EC)No.1272/2008)

Symbol & Indication: Not required Hazard Statement: Not required Precautionary Statement: Not required

Special Precautions under CLP (EC)No.1272/2008 Annex II: Not required

This product complies with applicable rules and regulations under (EC)No.1907/2006 Annex XVII

Product Name: Print Cartridge Cyan SP C340A SDS Number: 407896

Date Prepared: 12/16/2015 Date Modified: 12/16/2015 Date Printed: 08/29/2016



Section 16: 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 regired [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 EU Directive 91/155/ EEC 91/155/ EEC 1999/45/EC EU Directive 1999/45/EC

CLP (EC)No.1272/2008: Regulation (EC)No.1272/2008 of the European Parliamant 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

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

WHMIS Controlled

product OELs-TWA (Australia)

EC 304/2003

: Canada Workplace Hazardous Information System

: 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 The European Chemicals Agency **ECHA**

DFG-MAK MAK (Maximale Arbeitsplatz Konzentrationen) by Deutsche Forschungs Gemeinschaft **RoHS** Restriction of the use of certain Hazardous Substances in Electrical and Electronic

Equipment

Time Weighted Average TWA

IARC International Agency for Research on Cancer

National Toxicology Program NTP

WHMIS Workplace Hazardous Information System

NOHSC National Occupational Health and Safety Commission Act 1985

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