

Product Name : [RICOH COLOR TONER CASSETTE TYPE P1 YELLOW \(Yellow toner\)](#) SDS Number : [884901](#)
Issue Date : [14/Dec/2005](#) Revision Date : [10/July/2017](#) Output Date : [15/Apr/2020](#)

RICOH

Safety Data Sheet (Canada)

Section1 : Identification

Product Name : [RICOH COLOR TONER CASSETTE TYPE P1 YELLOW \(Yellow toner\)](#)
General Use : [The Image Formation of Printing Machine or Copier](#)
Product Description : [Toner Cartridge](#)
SDS Number : [884901](#)

Company / Undertaking Identification

Company Name : [Ricoh Canada, Inc.](#)
Department : [Environmental Sustainability and Product Compliance](#)
Address : [5560 Explorer Drive, Suite 100, Mississauga, ON, Canada L4W 5M3](#)
Telephone Number : [1-888-742-6417](#)
Emergency Telephone Number : [1-800-336-6737](#)
E-mail : environmentinfo@ricoh-usa.com

Section2 : Hazards Identification

Classification

Physical hazards

[None](#)

Health hazards

[None](#)

Environmental hazards

[None](#)

Other Hazards

Combustible Dust [Dust explosion \(like most finely divided organic powders\).](#)

Label element

[None](#)

Section3 : Composition/Information on Ingredientss

Substance or Preparation

Preparation

Chemical Nature

Ingredients	Chemical Formula	CAS.No.	Contents(%)
Polyol Resin	Confidential	Confidential	>85

Organic Pigment	C18H18N4O6	6358-31-2	<10
Organic Salt	Confidential	Confidential	<5
Titan Oxide	TiO2	13463-67-7	0.1-1

Section4 : 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

Most important symptoms/effects, acute, and delayed

Not available

Indication of immediate medical attention and special treatment needed, if necessary

Immediate medical attention is not required.

Section5 : 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.

Wear full bunker gear in case of burning in large quantities.

Section6 : 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 remainder with wet cloth. If a vacuum cleaner is used, a dust explosion-proof type must be chosen.

Section7 : 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 35 degrees 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

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)

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value	Form
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form
Titanium dioxide (CAS 13463-67-7)	TWA	3 mg/m3 10 mg/m3	Respirable fraction. Total dust.

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value	Form
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)			
Components	Type	Value	Form
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	Total dust.

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)			
Components	Type	Value	Form
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	Total dust.

Personal Protection

Respiratory Protections

None required in normal use. If the limit of exposure concentration 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.

Section9 : Physical and Chemical Properties

Appearance

Physical State : Solid

Form : Powder
Colour : Yellow
Odour : Slightly plastic odour
Odour Threshold : Not available

Information

pH : Not applicable

Specific Temperatures/Temperature Ranges at Which Changes in Physical State Occur

Boiling Point (degrees centigrade) : Not applicable

Melting Point (degrees centigrade) : (Softening point) Approx.110

Auto-Ignition Temperature : Not available
Decomposition Temperature (degrees centigrade) : Not available
Flash Point (degrees centigrade) : Not applicable
Explosion Properties (degrees centigrade) : This product is considered a nonexplosive material under normal use.

Evaporation Rate : Not applicable

Vapor Pressure (Pa) : Not applicable

Vapor Density(AIR=1) : Not applicable

Density (g/cm3) : Approx.1.2 Measuring Temp (degrees centigrade) : 25

Solubility

Water Solubility (g/L) : Slightly soluble

Chloroform Solubility (g/L) : Slightly soluble

Octanol/Water Partition Coefficient

Not available

Other Information

Flammability : Not flammable

Upper/Lower Flammability or Explosive Limits

Upper Flammability or Explosive Limits : Not available
(g/m3)

Lower Flammability or Explosive Limits : Not available
(g/m3)

Viscosity (Pa · s) : Not applicable

Volatile (%) : 0.2 or below

Section10 : 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.

Section11 : 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 :

In 2008 IARC the re-evaluated Titanium dioxide as a Group 2B carcinogen 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 Titanium dioxide at levels that induce particle overload of the lung.

Use of this product, as intended, dose not result in inhalation of excessive dust.

Epidemiological study to date have not revealed any evidence of the relationbetween exposure to titanium dioxide and diseases of the respiratory tract beyond general effects of dust.

Mutagenicity: Negative (Ames test)

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

Toxicity

Spsecific target orgen

toxicity-single exposure

Not available.

Spsecific target orgen

toxicity-repeated exposure

Not available.

Aspiration hazard

Does not contain substances listed as hazardous to reproductive health.

Symptoms related to the physical, chemical and toxicological characteristics

Not available

Section12 : Ecological Information

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

Persistence/Degradability : Not available

Bioaccumulation : Not available

Ecotoxicity
Acute Toxicity for Fish : Not classified as toxic (Regulation (EC) No 1272/2008).
(LC50)
Acute Toxicity for Daphnia : Not classified as toxic (Regulation (EC) No 1272/2008).
(EC50)
Algae Inhibition Test (IC50) : Not classified as toxic (Regulation (EC) No 1272/2008).
Other Advers Effects : Not available

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- : Not applicable

DGR

The UN Classification : Not applicable
Number

UN Proper Shipping Name : Not applicable

Class : Not applicable

Packing Group, If : Not applicable
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 (EU Regulation (EC)No. 1272/2008)

Symbol & Indication : Not required

Hazard Statement : Not required

Precautionary statement : Not required

Special Precautions under EU Regulation 1272/2008 Annex II :

Not required

REACH:(EC)No.1907/2006 Annex XVII

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

Section16 : Other Information

Issue Date : [14/Dec/2005](#)

Revision : [10/July/2017](#)

Date

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
91/155/ EEC	: EU Directive 91/155/ EEC
1907/2006 Annex XVII	: Regulation (EC) No 1907/2006 Annex XVII
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 Canada, 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 Canada, Inc. assumes no legal responsibility for use or reliance upon this information.