

Product Name : [RICOH COLOR TONER CASSETTE TYPE P1 BLACK \(Black toner\)](#)  
SDS Number : [884900](#)  
Issue Date : [7/Sept/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 BLACK \(Black toner\)](#)  
General Use : [The Image Formation of Printing Machine or Copier](#)  
Product Description : [Toner Cartridge](#)  
SDS Number : [884900](#)

### Company / Undertaking Identification

Company Name : [Ricoh Canada, Inc.](#)  
Department : [Environmental Sustainability and Product Compliance](#)  
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### 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(%)            |
|------------------------------|------------------------------|------------------------------|------------------------|
| <a href="#">Polyol Resin</a> | <a href="#">Confidential</a> | <a href="#">Confidential</a> | <a href="#">&gt;85</a> |

|              |              |              |       |
|--------------|--------------|--------------|-------|
| Carbon Black | C            | 1333-86-4    | <10   |
| Organic Salt | Confidential | Confidential | <5    |
| Silica       | O2Si         | 7631-86-9    | <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                |
|-----------------------------------|------|----------|---------------------|
| Carbon black (CAS 1333-86-4)      | TWA  | 3 mg/m3  | Inhalable fraction. |
| 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 |
|-----------------------------------|------|-----------|------|
| Carbon black (CAS 1333-86-4)      | TWA  | 3.5 mg/m3 |      |
| 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                 |
|-----------------------------------|------|----------|----------------------|
| Carbon black (CAS 1333-86-4)      | TWA  | 3 mg/m3  | Inhalable            |
| Titanium dioxide (CAS 13463-67-7) | TWA  | 3 mg/m3  | Respirable fraction. |
|                                   |      | 10 mg/m3 | Total dust.          |

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

| Components                        | Type | Value    | Form                |
|-----------------------------------|------|----------|---------------------|
| Carbon black (CAS 1333-86-4)      | TWA  | 3 mg/m3  | Inhalable fraction. |
| 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        |
| Carbon black (CAS 1333-86-4)                                                 | TWA  | 3 mg/m3  |             |
| 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        |
| Carbon black (CAS 1333-86-4)                                                                         | TWA  | 3.5 mg/m3 |             |
| 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 : Black  
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) : Insoluble  
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 (g/m3) : Not available  
Lower Flammability or Explosive Limits (g/m3) : Not available  
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.

|                                        |
|----------------------------------------|
| Section 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 and titanium dioxide contained in this product are 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.

In the animal experiment with very high concentration of titanium dioxide (excessive burden of rat's lungs clearance mechanism (overload phenomenon)), the rat alone showed lung tumor. Under a normal use practice, the concentration should be far lower than the above; and it is assumed that there is no such use.

Also, relation between respiratory disease and work exposure of titanium dioxide is not observed with epidemiological survey.

Mutagenicity: Negative (Ames test)

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

Toxicity

Specific target organ

toxicity-single exposure

Not available.

Specific target organ

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 (LC50) : [Not classified as toxic \(Regulation \(EC\) No 1272/2008\).](#)  
Acute Toxicity for Daphnia (EC50) : [Not classified as toxic \(Regulation \(EC\) No 1272/2008\).](#)  
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 Number : [Not applicable](#)

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 : [7/Sept/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                                                             |

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