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TN2166-0101 Product Code: 9452B / F42-9027

IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE **SECTION 1** COMPANY/UNDERTAKING

Product Identifier:

Canon Toner 034 Magenta **Product Name:**

Product Code: 9452B / F42-9027

Relevant Identified Uses: Toner for electrophotographic apparatus

Details of Supplier of Safety Data Sheet:

Canon Singapore Pte. Ltd. **Supplier:**

1 HarbourFront Avenue #04-01 Keppel Bay Tower Singapore 098632 Address:

Telephone Number: 65-6799 8888

cspl_msds@canon.com.sg E-mail Address:

Emergency Telephone Number:

Manufacturer:

Address: 30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo 146-8501, Japan

SECTION 2 HAZARDS IDENTIFICATION

Emergency Overview: Magenta fine powder, slight plastic odor.

US Regulatory Status under OSHA HCS:

Not classified as hazardous.

US Label Elements under OSHA HCS:

Signal Word: Not required

Hazard Warning: Not required

Safety Advice: Not required

Hazardous Component: Not required

EU Classification under 1999/45/EC:

Not classified as dangerous.

EU Label Elements under 1999/45/EC:

Symbol & Indication: Not required

R-Phrase: Not required

S-Phrase: Not required

Dangerous Component: Not required

Applicable Label Elements in accordance with Annex V to 1999/45/EC:

Not required

Other Hazards: None



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SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Substance or Mixture: Mixture

Ingredient(s):

| Chemical Name/ Generic Name | CAS #/ | Concentration/ Concentration Range (%) | EU Classification according to | | EU Classification according to | | Note to |
|--------------------------------|--------------------------|--|--|------------|---|--|--------------------------------|
| | EC# | | 67/548/EE Symbol/ Indication of Danger | R-Phrase*1 | (EC) No 127 Hazard Class/ Category Code | /2/2008 Hazard Statement* ¹ | Other Hazards* ² |
| Polyester resin | Confidential | 80-90 | None | None | None | None | |
| Pigment | Confidential | 5-10 | None | None | None | None | |
| Amorphous silica | 7631-86-9/ 231-545-4 | 1-3 | None | None | None | None | (1) |
| Titanium dioxide | 13463-67-7/ 236-675-5 | < 1 | None | None | None | None | (1) |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

^{*1} Full texts of R-phrase(s) and Hazard statement(s) are listed in SECTION 16

Carcinogen(s)

Chemical Name CAS# Reference Titanium dioxide (< 1%) 13463-67-7 IARC: Group 2B. NTP; OSHA; Part 3 of Annex VI to Regulation (EC) No 1272/2008: Not listed.

^{*2} The following substance(s) is (are) marked with (1), (2) and/or (3)

⁽¹⁾ Substance for which Occupational Exposure Limit(s) is (are) established (See SECTION 8)

⁽²⁾ PBT substance or vPvB substance under Regulation (EC) No 1907/2006

⁽³⁾ Substance listed in Candidate List of SVHC for Authorisation under Regulation (EC) No 1907/2006



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SECTION 4 FIRST AID MEASURES

First Aid Measures:

Inhalation:

If symptoms are experienced, move victim to fresh air and obtain medical advice.

Ingestion:

Rinse mouth. Drink 1 or 2 glasses of water. If irritation or discomfort occurs, obtain medical advice immediately. **Skin:**

Wash with soap and water. If irritation persists, obtain medical advice.

Eve:

Do not allow victim to rub eye(s). Flush with lukewarm, gently flowing water for 5 minutes or until particle is removed. If irritation persists, obtain medical attention.

Most Important Symptoms and Effects, both Acute and Delayed:

Inhalation:

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

Ingestion:

Low acute toxicity. Ingestion is a minor route of entry for intended use of this product.

Skin:

May be non-irritant.

Eye:

May cause transient slight irritation.

Chronic Effects:

Prolonged inhalation of excessive amounts of dust may cause lung damage. Use of this product as intended does not result in inhalation of excessive amounts of dust.

Indication of Any Immediate Medical Attention and Special Treatment Needed:

None

SECTION 5 FIRE FIGHTING MEASURES

Extinguishing Media:

Suitable Extinguishing Media:

CO2, water, dry chemicals

Unsuitable Extinguishing Media:

None

Special Hazards:

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

Hazardous Combustion Products:

CO2, CO

Advice for Fire-fighters:

Wear gloves, glasses, a mask if necessary.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Avoid breathing dust. Wash thoroughly after handling.

Environmental Precautions:

Do not wash away into sewer.

Methods and Material for Containment and Cleaning Up:

Sweep slowly spilled powder on to paper, and carefully transfer into a waste container. Clean remainder with wet paper, wet cloth or a vacuum cleaner.

If a vacuum cleaner is used, it must rate as a dust explosion-proof type. Fine powder can form explosive dust-air mixtures.



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| SECTION 7 HANDLE | ING AND STORAG | E | | | | | | | | |
|--|---|---|-----------------|--|--|--|--|--|--|--|
| Precautions for Safe Handli | ing: | | | | | | | | | |
| Avoid breathing dust. Wash thoroughly after handling. | | | | | | | | | | |
| Use with adequate ventilation. | | | | | | | | | | |
| Conditions for Safe Storage, Including Any Incompatibilities: | | | | | | | | | | |
| Keep out of the reach of children. | | | | | | | | | | |
| Keep away from oxidizing materials. | | | | | | | | | | |
| Specific End Uses: | | | | | | | | | | |
| Toner for electrophotographic apparatus. | | | | | | | | | | |
| For more information, please refer to the instruction of this product. | | | | | | | | | | |
| | | | | | | | | | | |
| SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION | | | | | | | | | | |
| Control Parameters: | USA | ACGIH TLV | EU OEL | | | | | | | |
| | OSHA PEL | ACGIII ILV | EC OLL | | | | | | | |
| Product (Toner) | PNOR: | PNOS: | Not established | | | | | | | |
| | TWA 15 mg/m ³ | TWA 10 mg/m^3 | | | | | | | | |
| | (Total dust), | (Inhalable fraction), | | | | | | | | |
| | TWA 5 mg/m ³ (Respirable fraction) | TWA 3 mg/m ³ (Respirable fraction) | | | | | | | | |
| | (жезриале насион) | (жезриале насион) | | | | | | | | |
| Amorphous silica | 20 mppcf, | Not established | Not established | | | | | | | |
| | $80 \text{ (mg/m}^3)/\% \text{SiO}_2$ | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Titanium dioxide | TWA 15 mg/m ³ | TWA 10 mg/m^3 | Not established | | | | | | | |
| | (Total dust) | C | | | | | | | | |
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| Exposure Controls: | | | | | | | | | | |
| Engineering Controls: | | | | | | | | | | |
| No special ventilation e | equipment is needed u | inder intended use of the | nis product. | | | | | | | |
| Individual Protection Me | easures: | | | | | | | | | |
| Eye/Face Protection: | Required | | | | | | | | | |
| | Not Required | | | | | | | | | |
| | root required | | | | | | | | | |
| Skin Protection: | ☐ Required | | | | | | | | | |
| | Not Required | | | | | | | | | |
| | _ | | | | | | | | | |
| Respiratory Protection | | | | | | | | | | |
| | Not Required | | | | | | | | | |



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PHYSICAL AND CHEMICAL PROPERTIES **SECTION 9 Information on Basic Physical and Chemical Properties:** Appearance: Magenta fine powder Odor: Slight plastic odor pH: Not applicable **Melting Point/Freezing Point (°C):** 85-120 (Softening point) **Initial Boiling Point and** Not applicable **Boiling Range** (°C): Flash Point(°C): Not applicable Not applicable **Evaporation Rate:** Estimate: Not-flammable (Test method: Directive 92/69/EEC, A10 Flammability: Flammability (Solids)) (See SECTION 16) Upper/Lower Flammable or Not applicable **Explosive Limits:** Vapor Pressure: Not applicable **Vapor Density:** Not applicable **Relative Density:** 1.0-1.5 Negligible Water Solubility: Partially soluble in toluene and xylene. **Fat Solubility:** Partition Coefficient (n-Octanol/Water): Not applicable **Auto-ignition Temperature (°C):** Not available **Decomposition Temperature (°C):** > 200 Viscosity (mPa s): Not applicable Can form explosive dust-air mixtures when finely dispersed in air. **Explosive Properties: Oxidizing Properties:** Not available **Other Information:** Not available **SECTION 10** STABILITY AND REACTIVITY Reactivity: None **⊠** Stable **Chemical Stability:** Possibility of Hazardous Reactions: None **Conditions to Avoid:** None **Incompatible Materials:** Strong oxidizers

Date of Issue: June 27, 2014 Revision Date:

Hazardous Decomposition Products: CO, CO2



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SECTION 11 TOXICOLOGICAL INFORMATION

Information on Toxicological Effects:

Acute Toxicity:

Inhalation:

Not available

Ingestion:

Estimate: LD50 > 2000 mg/kg (See SECTION 16)

Corrosivity/Irritation:

Skin:

Estimate: Non-irritant (See SECTION 16)

Eye:

Estimate: Transient slight conjunctival irritation only. (See SECTION 16)

Sensitization:

Skin:

Estimate: Non-sensitizing (See SECTION 16)

Repeated Dose Toxicity:

Muhle et al. reported pulmonary response upon chronic inhalation exposure in rats to a toner enriched in respirable-sized particles compared to commercial toner. No pulmonary change was found at 1 mg/m^3 which is most relevant to potential human exposure. A minimal to mild degree of fibrosis was noted in 22% of the animals at 4 mg/m^3 , and a mild to moderate degree of fibrosis was observed in 92% of the animals at 16 mg/m^3 .

These findings are attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lung for a prolonged interval.

Carcinogenicity:

The IARC 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 evidence such as development of lung tumors in rats receiving chronic inhalation exposure to powdered titanium dioxide at levels that induce particle overload of the lung.

However, there is an inhalation study of a toner containing titanium dioxide which suggested no association between toner exposure and tumor development in rats.

Mutagenicity:

Ames Test (S. typhimurium, E. coli): Negative

Toxicity for Reproduction:

Not available

Other Information:

Not available



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SECTION 12 ECOLOGICAL INFORMATION

Toxicity: Estimate: Fish, 96h LC50 > 100 mg/l

Estimate: Crustaceans, 48h EC50 > 100 mg/l

Estimate: Algae, ErC50(0-72h) > 100 mg/l (See SECTION 16)

Persistence and Degradability: Not available

Bioaccumulative Potential: Not available

Mobility in Soil: Not available

Results of PBT and vPvB No results that the component(s) of this toner meet(s) the PBT or vPvB criteria

Assessment: under Regulation (EC) No 1907/2006.

Other Adverse Effects: Not available

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Treatment Methods:

DO NOT put toner or toner container into fire; heated toner may cause severe burns. DO NOT shred a toner container, unless dust-explosion preventing measures are taken. Finely dispersed particles form explosive mixtures in air. Disposal should be subject to federal, state and local laws.

SECTION 14 TRANSPORT INFORMATION

UN Number: None

UN Proper Shipping Name: None

Transport Hazard Class: None

Packing Group: None

Environmental Hazards: Not classified as environmentally hazardous under UN Model Regulations and

marine pollutant under IMDG Code.

Special Precautions for User: None

SECTION 15 REGULATORY INFORMATION

< USA Information >

SARA Title III §313:

Chemical Name Weight %

None

California Proposition 65:

Chemical Name Weight %

None

< EU Information >

Safety, Health and Environmental Regulations/Legislation:

(EC) No 1907/2006: Authorisation: Not regulated

Restriction: Not regulated

(EC) No 1005/2009: Not regulated

(EC) No 850/2004: Not regulated

(EC) No 649/2012: Not regulated

Others: None

Chemical Safety Assessment under (EC) No 1907/2006: Not required



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SECTION 15 REGULATORY INFORMATION (continued)

< Canada Information >

WHMIS Controlled Product: Not applicable (Manufactured article)

< Australia Information >

Statement of Hazardous Nature: Not classified as hazardous according to criteria of NOHSC.

SECTION 16 OTHER INFORMATION

<Term explanation>

Estimate: Estimate based on data of similar product or the ingredient(s) of this product.

<EU SDS information>

This safety data sheet (SDS) is supplied voluntarily.

Literature References:

- U.S. Department of Labor, 29CFR Part 1910
- U.S. Environmental Protection Agency, 40CFR Part 372
- U.S. Consumer Product Safety Commission, 16CFR Part 1500
- ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices
- U.S. Department of Health and Human Services National Toxicology Program, Annual Report on Carcinogens
- World Health Organization International Agency for Research on Cancer, IARC Monographs on the Evaluation on the Carcinogenic Risk of Chemicals to Humans
- EU Directive 1999/45/EC
- EU Regulation (EC) No 1907/2006, (EC) No 1272/2008, (EC) No 1005/2009, (EC) No 850/2004, (EC) No 649/2012
- Canada Workplace Hazardous Materials Information System
- Australia National Occupational Health and Safety Commission's Approved Criteria for Classifying Hazardous Substances[NOHSC:1008]

Abbreviations:

OSHA HCS: Occupational Safety and Health Act, Hazard Communication Standard (USA)

FHSA: Federal Hazardous Substances Act (USA) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative SVHC: Substances of Very High Concern

IARC: International Agency for Research on Cancer

NTP: National Toxicology Program (USA)

OSHA PEL: PEL(Permissible Exposure Limit) under Occupational Safety and Health Administration (USA) ACGIH TLV: TLV(Threshold Limit Value) under American Conference of Governmental Industrial Hygienists

EU OEL: Occupational exposure limits at Community level under Directive 2004/37/EC, 98/24/EC, 91/322/EEC, 2000/39/EC, 2006/15/EC and

2009/161/EU

TWA: Time Weighted Average STEL: Short Term Exposure Limit

PNOR: Particulates Not Otherwise Regulated

PNOS: Particles (insoluble or poorly soluble) Not Otherwise Specified WHMIS: Workplace Hazardous Materials Information System NOHSC: National Occupational Health and Safety Commission

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