

Page 1 of 8 MSDS #: TN1260-0303

Product Code: 4232A / F43-7521 SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING **Product Identifier:** Canon GPR-5 Magenta Drum Unit **Product Name: Product Code:** 4232A / F43-7521 Relevant Identified Uses: Toner for electrophotographic apparatus **Details of Supplier of Safety Data Sheet: Supplier:** Address: **Telephone Number: Emergency Telephone Number: Manufacturer:** Canon Inc. 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

Date of Issue: March 8, 2001 Revision Date: January 20, 2011

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

Not required

Other Hazards: None

Page 2 of 8
MSDS #: TN1260-0303

Product Code: 4232A / F43-7521

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 12' Hazard Class/ Category Code	/2/2008 Hazard Statement* ¹	Other Hazards* ²
Styrene acrylate copolymer	Confidential	75-85	None	None	None	None	
Wax	Confidential	5-10	None	None	None	None	
Pigment	Confidential	5-10	None	None	None	None	
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 NameCAS#ReferenceTitanium dioxide (< 1%)</td>13463-67-7IARC: 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



Page 3 of 8 MSDS #: TN1260-0303

Product Code: 4232A / F43-7521

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.

Eve:

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.



Page 4 of 8

MSDS #: TN1260-0303 Product Code: 4232A / F43-7521

SECTION 7	HANDLING AND STORAGE
Precautions for	r Safe Handling:
Avoid brea	athing dust. Wash thoroughly after handling.
Use with a	dequate ventilation.
Conditions for	Safe Storage, Including Any Incompatibilities:
Keep out o	of the reach of children.
Keep away	y from oxidizing materials.
Specific End U	Jses:
Toner for	electrophotographic apparatus.
For more i	information, please refer to the instruction of this product.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION Control Parameters: ACGIH TLV EU OEL USA DFG MAK OSHA PEL PNOS: Product (Toner) PNOR: Not established Dust: TWA 15 mg/m³ TWA 10 mg/m³ 4 mg/m^3 (Total dust), (Inhalable fraction), (Inhalable fraction), TWA 5 mg/m³ TWA 3 mg/m³ 1.5 mg/m^3 (Respirable fraction) (Respirable fraction) (Respirable fraction) TWA 15 mg/m³ TWA 10 mg/m³ Titanium dioxide Not established Not established (Total dust) **Exposure Controls: Engineering Controls:** No special ventilation equipment is needed under intended use of this product. **Individual Protection Measures: Eye/Face Protection:** Required Not Required **Skin Protection:** ☐ Required Not Required **Respiratory Protection:** Required Not Required



Page 5 of 8 TN1260-0303

MSDS #:

MATERIAL SAFETY DATA SHEET Product Code: 4232A / F43-7521

PHYSICAL AND CHEMICAL PROPERTIES **SECTION 9 Information on Basic Physical and Chemical Properties:** Appearance: Magenta fine powder Odor: Slight plastic odor pH: Not applicable 100-150 (Softening point) **Melting Point/Freezing Point (°C): 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 - 1.2Negligible 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 Hazardous Decomposition Products: CO, CO2



Page 6 of 8 MSDS #: TN1260-0303

Product Code: 4232A / F43-7521

SECTION 11 TOXICOLOGICAL INFORMATION

Information on Toxicological Effects:

Acute Toxicity:

Inhalation:

Not available

Ingestion:

Rat, LD50 > 2000 mg/kg

Corrosivity/Irritation:

Skin:

Rabbit, non-irritant

Eye:

Rabbit, transient slight conjunctival irritation only.

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): Negative

Toxicity for Reproduction:

Not available

Other Information:

Not available



Page 7 of 8
MSDS #: TN1260-0303

ET Product Code: 4232A / F43-7521

SECTION 12 ECOLOGICAL INFORMATION

Toxicity: Fish, 96h LL50 > 1000 mg/l (WAF)

Crustaceans, 48h EL50 > 1000 mg/l (WAF) Algae, ErL50(0-72h) > 1000 mg/l (WAF)

Persistence and Degradability: Not available

Bioaccumulative Potential: Not available

Mobility in Soil: Not available

Results of PBT and vPvB No res

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 689/2008: Not regulated

Others: None

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



Page 8 of 8

MSDS #: TN1260-0303 Product Code: 4232A / F43-7521

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

<Revised information from the previous version>

Entirely revised

<Term explanation>

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

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
- DFG, List of MAK and BAT Values
- 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 689/2008
- 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

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

2009/161/EU

DFG MAK: MAK(Maximale Arbeitsplatz-Konzentration) under Deutsche Forschungsgemeinschaft

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

The information, data and recommendations set forth herein (the "Information") are presented in good faith and are believed to be correct as of the date hereof. The company/manufacturer makes no representations as to the completeness or accuracy of the Information and disclaims responsibility for any reliance thereon. The Information is provided upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. Any use of the Information must be determined by the user to be in accordance with applicable Federal, state and local laws and regulations. In no event will the company/manufacturer be responsible for damages of any nature whatsoever resulting from the use or reliance upon the Information.

NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE WITH RESPECT TO THE INFORMATION OR THE PRODUCT TO WHICH THE INFORMATION REFERS.