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

Product Identifier:					
Product Name:	Canon C-EXV 16/17 Magenta Drum Unit (for Copier/Printer)				
Product Code:	0256B / F48-0221				
Relevant Identified U	ses: Toner for electrophotographic apparatus				
Details of Supplier of Supplier:	Details of Supplier of Safety Data Sheet: Supplier: Canon Europa NV				
Address:	Bovenkerkerweg 59, 1185XB Amstelveen, The Nederlands				
	+31 20 5458545, +31 20 5458222				
E-mail Address:	www.canon-europe.com, ceu-Reach@canon-europe.com				
Emergency Telephone	DENMARK: +45 82 12 12 ic GERMANY: +49 30 19240, +49 761 19240; BELGIUM & NETHERLANDS: +32 70 245 245; FRANCE: +33 1 40 05 48 48; UK only 0845 4647; FINLAND: +358 9 471 977; SWEDEN: +46 8 33 12 31				
Manufacturer:	Canon Inc.				
Address:	30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo 146-8501, Japan				
SECTION 2 HA	ZARDS IDENTIFICATION				
Emergency Overview	Magenta fine powder, slight plastic odor.				
US Regulatory Status Not classified as ha					
US Label Elements un	ider OSHA HCS:				
Signal Word:	Not required				
Hazard Warning:	Not required				
Safety Advice:	Not required				
Hazardous Compor	nent: Not required				
	EU Classification under 1999/45/EC: Not classified as dangerous.				
EU Label Elements under 1999/45/EC:					
Symbol & Indicatio	Not required				
R-Phrase:	Not required				
S-Phrase:	Not required				
Dangerous Compor	nent: Not required				
Applicable Label E Not required	lements in accordance with Annex V to 1999/45/EC:				
Other Hazards: None					



MATERIAL SAFETY DATA SHEET

Page 2 of 8 MSDS #: TC1420-0203 Product Code: 0256B / F48-0221

SECTION 3

COMPOSITION/INFORMATION ON INGREDIENTS

Substance or Mixture: <u>Mixture</u> Ingredient(s):

Chemical Name/ Generic Name	CAS #/ EC #	Concentration/ Concentration			EU Classificatio	n according to	Note to Other
		Range (%)	Symbol/ Indication of Danger	R-Phrase ^{*1}	(EC) No 1 Hazard Class/ Category Code	Hazard Statement ^{*1}	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

*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

Carcinogen(s) Chemical Name

 CAS#
 Reference

 13463-67-7
 IARC: Gr

Titanium dioxide (<1%)

IARC: Group 2B. NTP; OSHA; Part 3 of Annex VI to Regulation (EC) No 1272/2008: Not listed.



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.

Eye:

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:

<u>CO2, CO</u>

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.

SECTION 7 HANDLING AND STORAGE

Precautions for Safe Handling:

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

trol Parameters:	USA OSHA PEL	ACGIH TLV	EU OEL
Product (Toner)	PNOR: TWA 15 mg/m ³ (Total dust), TWA 5 mg/m ³ (Respirable fraction)	PNOS: TWA 10 mg/m ³ (Inhalable fraction), TWA 3 mg/m ³ (Respirable fraction)	Not established
Titanium dioxide	TWA 15 mg/m ³ (Total dust)	TWA 10 mg/m ³	Not established

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



SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

nformation on Basic Physical and Ch Appearance:	Magenta fine powder
Odor:	Slight plastic odor
pH:	Not applicable
Melting Point/Freezing Point (°C):	100-150 (Softening point)
Initial Boiling Point and Boiling Range (°C):	Not applicable
Flash Point(°C):	Not applicable
Evaporation Rate:	Not applicable
Flammability:	Estimate: Not-flammable (Test method: Directive 92/69/EEC, A10 Flammability (Solids)) (See SECTION 16)
Upper/Lower Flammable or Explosive Limits:	Not applicable
Vapor Pressure:	Not applicable
Vapor Density:	Not applicable
Relative Density:	1.0-1.2
Water Solubility:	Negligible
Fat Solubility:	Partially soluble in toluene and xylene.
Partition Coefficient (n-Octanol/Wate	er): Not applicable
Auto-ignition Temperature (°C):	Not available
Decomposition Temperature (°C):	> 200
Viscosity (mPa s):	Not applicable
Explosive Properties:	Can form explosive dust-air mixtures when finely dispersed in air.
Oxidizing Properties:	Not available
Other Information:	Not available

Reactivity:	None		
Chemical Stability:	⊠ Stable □ Unstable		
Possibility of Hazardous Reactions:	None		
Conditions to Avoid:	None		
Incompatible Materials:	Strong oxidizers		
Hazardous Decomposition Products: CO, CO2			



SECTION 11 TOXICOLOGICAL INFORMATIO	N
-------------------------------------	---

Information on Toxicological Effects:

Acute Toxicity: Inhalation:

Not available

Ingestion:

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

Corrosivity/Irritation:

Skin:

Estimate: Rabbit, non-irritant (See SECTION 16)

Eye:

Estimate: Rabbit, transient slight conjunctival irritation only. (See SECTION 16)

Sensitization:

Skin:

Guinea pig: Non-sensitizing

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/m³.

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



MATERIAL SAFETY DATA SHEET

SECTION 12 ECOLOGICAL INFORMATION Toxicity: Estimate: Fish, 96h LL50 > 1000 mg/l (WAF) Estimate: Crustaceans, 48h EL50 > 1000 mg/l (WAF) Estimate: Algae, ErL50(0-72h) > 1000 mg/l (WAF) (See SECTION 16) Persistence and Degradability: Not available Not available **Bioaccumulative Potential:** 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 TRAN	NSPORT INFOR	MATION			
UN Number:	2807	2807			
UN Proper Shipping Name: Magnetized material					
Transport Hazard Clas	s: <u>9</u>				
Packing Group:					
Environmental Hazard		Not classified as environmentally hazardous under UN Model Regulations and marine pollutant under IMDG Code.			
Special Precautions for	User: 15 or more material.	r: 15 or more of those products shipped together, by air, are regulated as magnetized			
< USA Information > SARA Title III §313: <u>Chemical Name</u>	ULATORY INFO		Weight %		
None					
California Proposition Chemical Name			Weight %		
None					
< EU Information > Safety, Health and Env	ironmental Regu	lations/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 Assess	ment under (EC)) No 1907/2006: Not required			



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

- 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 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

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.