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

• • • • •				
Product Identifier:				
Product Name: <u>C</u>	Canon C-EXV 8 Black Drum Unit (for Copier/Printer)			
Product Code: <u>76</u>	7625A / F43-8801			
Relevant Identified Uses	s: Toner for electrophotographic apparatus			
Details of Supplier of Sa Supplier:	afety Data Sheet: Canon Europa NV			
Address:	Bovenkerkerweg 59, 1185XB Amstelveen, The Nederlands			
Telephone Number: _+	+31 20 5458545, +31 20 5458222			
E-mail Address:	www.canon-europe.com, ceu-Reach@canon-europe.com			
Emergency Telephone N	Number: DENMARK: +45 82 12 12; 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: <u>C</u>	Canon Inc.			
Address: 3	0-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo 146-8501, Japan			
SECTION 2 HAZA	ARDS IDENTIFICATION			
Emergency Overview: B	Black fine powder, slight plastic odor.			
US Regulatory Status un Not classified as haza				
US Label Elements unde	er OSHA HCS:			
Signal Word:	Not required			
Hazard Warning:	Not required			
Safety Advice:	Safety Advice: Not required			
Hazardous Componer	nt: Not required			
EU Classification under Not classified as dans				
EU Label Elements und				
Symbol & Indication:	Not required			
R-Phrase:	Not required			
S-Phrase:	Not required			
Dangerous Componer	nt: Not required			
Applicable Label Eler Not required	ments in accordance with Annex V to 1999/45/EC:			



MATERIAL SAFETY DATA SHEET

Page 2 of 8 MSDS #: TC1061-0305 Product Code: 7625A / F43-8801

SECTION 3

COMPOSITION/INFORMATION ON INGREDIENTS

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

Chemical Name/	CAS #/	Concentration/			EU Classification	according to	Note to Other
Generic Name	EC #	Concentration Range (%)	67/548/EE Symbol/ Indication of Danger	R-Phrase ^{*1}	(EC) No 127 Hazard Class/ Category Code	/2/2008 Hazard Statement ^{*1}	Hazards*2
Styrene acrylate copolymer	Confidential	70-80	None	None	None	None	
Wax	Confidential	5-15	None	None	None	None	
Carbon black	1333-86-4/ 215-609-9	5-10	None	None	None	None	(1)
Polyester resin	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
Carbon black (5-10%)	1333-86-4	IARC: Group 2B.
Titanium dioxide (< 1%)	13463-67-7	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	ACGIH TLV	EU OEL
	OSHA PEL	,,	
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	TWA 3 mg/m ³	
	(Respirable fraction)	(Respirable fraction)	
Carbon black	TWA 3.5 mg/m ³	TWA 3 mg/m ³	Not established
		(Inhalable fraction)	
Titanium dioxide	TWA 15 mg/m ³	TWA 10 mg/m ³	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



SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Ch Appearance:	emical Properties: Black 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:	<u>CO, CO2</u>		



SECTION 11	TOXICOLOGICAL INFORMATION

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 carbon black and titanium dioxide as Group 2B carcinogens, for which there are inadequate human evidences, but sufficient animal evidences. The latter are based upon the evidences such as development of lung tumors in rats receiving chronic inhalation exposure to powdered carbon black and titanium dioxide at levels that induce particle overload of the lung.

However, there are inhalation studies of a toner containing carbon black and a toner containing titanium dioxide which demonstrated or 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



SECTION 12

Toxicity:

MATERIAL SAFETY DATA SHEET

 WATERIAL SAFETT DATA SHEET

 Froduct Code:
 7023A / F43-886

 ECOLOGICAL INFORMATION

 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)

Persistence and Degradability:Not available

Bioaccumulative Potential:	Not available
Mobility in Soil:	Not available
Results of PBT and vPvB Assessment:	No results that the component(s) of this toner meet(s) the PBT or vPvB criteria 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 TRA	NSPORT INFOR	RMATION			
UN Number:	2807	2807			
UN Proper Shipping N	ame: <u>Magnetize</u>	Magnetized material			
Transport Hazard Cla	ss: <u>9</u>	9			
Packing Group:	None				
Environmental Hazaro		Not classified as environmentally hazardous under UN Model Regulations and marine pollutant under IMDG Code.			
Special Precautions for	r User: 21 or more material.	21 or more of those products shipped together, by air, are regulated as magnetized			
< USA Information > SARA Title III §313: _Chemical Name	ULATORY INFO	DRMATION	Weight %		
<u>None</u> California Proposition <u>Chemical Name</u>			Weight %		
None					
< EU Information > Safety, Health and Env	vironmental Regu	lations/Legislation			
(EC) No 1907/2006	0	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				
Chamical Safatz A area	amont under (EC	$N_{0} = 1007/2006$			

Chemical Safety Assessment 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

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