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MATERIAL SAFETY DATA SHEET

MSDS #: TC1086-0202 Product Code: 6828A / R84-1012

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE

COMPANY/UNDERTAKING

Product Name: Canon EP-86 Cartridge Magenta for Laser Beam Printer

Product Code: 6828A / R84-1012

Manufacturer: Canon Inc., 30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo, Japan, Ph# 03-3758-2111

Supplier: Canon USA, Inc., One Canon Park, Melville, NY 11747, USA

Phone #: 1-800-OK-CANON 24 Hr. Emergency CHEMTREC # 1-800-424-9300

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

< Ingredient(s) >	
-------------------	--

Chemical Name / Generic name	CAS #/ EC #	Weight %	EU Symbol/ R-Phrase	USA OSHA PEL	ACGIH TLV	EU ILV	DFG MAK
Styrene acrylate copolymer	Confidential	75-85	None/ None	Not established	Not established	Not established	Not established
Wax	Confidential	5-10	None/ None	Not established	Not established	Not established	Not established
Pigment	Confidential	1-7	None/ None	Not established	Not established	Not established	Not established
Amorphous silica	7631-86-9/ 231-545-4	1-2	None/ None	20mppcf, 80(mg/m ³)/%SiO ₂	10mg/m³(TWA)	Not established	4mg/m³ (Inhalable fraction)

< Carcinogen >

Chemical Name CAS # Reference

No component of this toner is listed as a human carcinogen or a potential carcinogen in IARC Monographs, NTP, OSHA regulations or Annex I to Directive 67/548/EEC.

SECTION 3 HAZARDS IDENTIFICATION

EU Classification:

Not classified as dangerous.

Emergency Overview:

Magenta fine powder, slight plastic odor.

Potential Health Effects and Symptoms:

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.

Eye:

May cause transient slight irritation.

Skin:

May be non-irritant.

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.

Medical Conditions Generally known to be Aggravated by Exposure:

Not determined



MATERIAL SAFETY DATA SHEET

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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.

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.

Skin:

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

Note to Physicians:

None

SECTION 5 FIRE FIGHTING MEASURES

Fire Fighting Measures:

Extinguishing Media:

CO2, water, dry chemicals

Unsuitable Extinguishing Media:

None

Special Fire Fighting Procedures:

None

Unusual Fire and Explosion Hazards:

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

Fire and Explosive Properties (See also Section 9):

Hazardous Combustion Products:

CO2, CO

Other Properties:

Not available

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Avoid breathing dust.

Environmental Precautions:

Do not wash away into sewer.

Method for 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

Handling:

Avoid breathing dust.

Use with adequate ventilation.

Storage:

Keep out of the reach of children.

Keep away from oxidizing materials.

Specific Uses:

Toner for electrophotographic apparatus.

For more information, please refer to the instruction of this product.

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MSDS #: TC1086-0202 Product Code: 6828A / R84-1012

		OLS / PERSONAL PROTECTION						
Exposure Guideline								
USA OSHA PEL (TWA): 15 mg/m³ (Total dust), 5 mg/m³ (Respirable fraction) ACGIH TLV (TWA): 10 mg/m³ (Inhalable fraction), 3 mg/m³ (Respirable fraction)								
DFG (MAK): 10 mg/m (Innalable fraction), 3 mg/m (Respirable fraction) 4 mg/m³ (Inhalable fraction), 1.5 mg/m³ (Respirable fraction)								
(Also refer to SECTION 2)								
Engineering Contro Use adequate ven								
Personal Protection	Equipment(s):							
Respiratory Pro	tection: Required Not Requ	ired						
Eye/Face Protect	tion: Required							
	■ Not Requ	ired						
Skin Protection		☐ Required ☑ Not Required						
	Z 1 tot rioqu							
SECTION 9	PHYSICAL AND CH	EMICAL PROPERTIES						
Appearance:		Magenta fine powder						
Odor:		Slight plastic odor						
pH:		Not applicable						
Boiling Point/Range	(°C):	Not applicable						
Melting Point/Range(°C):		100 - 150 (Softening point)						
Decomposition Temperature (${}^{\circ}C$):		> 200						
Flash Point(°C):		Not applicable						
Flammable (Explosive) Limits:		Not applicable						
Autoignition Temperature(°C):		Not available						
Flammability:		Not-flammable (Test method : Directive 92/69/EEC, A10 Flammability (Solids))						
Explosive Properties	s:	Can form explosive dust-air mixtures when finely dispersed in air.						
Oxidizing Propertie	s:	Not available						
Vapor Pressure:		Not applicable						
Vapor Density:		Not applicable						
Density / Specific Gravity:		1.0 - 1.2						
Water Solubility:		Negligible						
Fat Solubility:		Partially soluble in toluene and xylene.						
Partition Coefficient (n-Octanol/Water):		Not applicable						
Percent Volatile:		Negligible						
Evaporation Rate:		Not applicable						
Viscosity (mPa s):		Not applicable						

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MSDS #: TC1086-0202 Product Code: 6828A / R84-1012

SECTION 10 STABILITY AND	REACTIVITY				
Stability:	Stable Unstable				
Conditions to Avoid:	None Strong oxidizers				
Materials to Avoid:					
Hazardous Decomposition Products:	CO, CO2				
Hazardous Polymerization:	☐ May Occur ☑ Will Not Occur				
Conditions to Avoid:	None				
SECTION 11 TOXICOLOGICA	AL INFORMATION				
Acute Toxicity: Inhalation: Not available					
Ingestion: Estimate: Rat, LD50 > 2000mg/l	Kg				
Eye: Estimate: Rabbit, transient slight	conjunctival irritation only.				
Skin: Estimate: Rabbit, non-irritant					
Sensitization: Estimate: Guinea pig, skin: Non-	sensitizing				
Mutagenicity: Ames Test (S. typhimurium, E. c	oli): Negative				
Reproductive Toxicity: Not available					
Carcinogenicity: Not available					
Others:					

Chronic effects:

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/m³ 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/m³, 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.

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MSDS #: TC1086-0202 Product Code: 6828A / R84-1012

SECTION 12 E	COLOG	SICAL INFORMATION				
Mobility:		Not available				
Persistence / Degrad	ability:	Not available				
Bioaccumulation: Ecotoxicity:		Not available Not available				
SECTION 13 D	ISPOSA	L CONSIDERATION				
Method of Disposal:	101 001	LONSIDERATION				
DO NOT put tone container, unless d	lust-explo	container into fire; heated toner may cause severe burns. DO NOT shred a toner osion preventing measures are taken. Finely dispersed particles form explosive mixtures ubject to federal, state and local laws.				
SECTION 14 T	RANSP	ORT INFORMATION				
UN #:	None					
UN Shipping Name:	None					
UN Classification:	None					
UN Packing Group:	None					
Marine Pollutant:	☐ Yes ⋈ No	Chemical name (wt%):				
Special Precautions:	None					
SECTION 15 R	REGULA	TORY INFORMATION				
< EU Information >						
Information on the Symbol & Indica		ot required				
R-Phrase: Not required						
S-Phrase: Not required						
Dangerous Com None	ponent(s):				
Special Precaution Not required	ons unde	r 1999/45/EC Annex V:				
Specific Provisions 76/769/EEC:	in Relati Not regu	ion to Protection of Man or the Environment:				
(EC)2037/2000:	Not regu	ılated				
(EC)304/2003:	Not regu	ılated				
Others:	None					
< USA Information >	>					
Information on the						
Signal Word:	Not requ	iired				
Hazard warning Not required	:					



MATERIAL SAFETY DATA SHEET

MSDS #: TC1086-0202 Product Code: 6828A / R84-1012

Safety Advice:

Not required

Hazardous Component(s):

None

SARA Title III §313:

Chemical Name Weight %

None

California Proposition 65:

Chemical Name Weight %

None

< 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:

Partially revised Section 11

Literature Reference:

- 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 76/769/EEC, 67/548/EEC, 1999/45/EC
- EU Regulation (EC)2037/2000, (EC)304/2003
- Canada Workplace Hazardous Materials Information System
- Australia National Occupational Health and Safety Commission's Approved Criteria for Classifying Hazardous Substances[NOHSC:1008]

Abbreviations

"EU" stands for European Union.

"OSHA PEL" stands for PEL(Permissible Exposure Limit) under Occupational Safety and Health Administration(USA).

"ACGIH TLV" stands for TLV(Threshold Limit Value) under American Conference of Governmental Industrial Hygienists.

"EU ILV" stands for Indicative Limit Values for Occupational Exposure under EU Directive 91/322/EEC and 2000/39/EC.

"DFG MAK" stands for MAK(Maximale Arbeitsplatzkonzentrationen) under Deutsche Forschungsgemeinschaft.

"TWA" stands for Time Weighted Average.
"IARC" stands for International Agency for Research on Cancer.

"NTP" stands for National Toxicology Program (USA).

"OSHA HCS" stands for Occupational Safety and Health Act, Hazard Communication Standard(USA).

"FHSA" stands for Federal Hazardous Substances Act(USA).

"WHMIS" stands for Workplace Hazardous Materials Information System.

"NOHSC" stands for National Occupational Health and Safety Commission Act 1985.

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