Canon

MATERIAL SAFETY DATA SHEET

SECTION 1	IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING		
Product Name:	EP-H Color Laser Toner	Cartridge Magenta	
Product Code:	1503A002AA		
Manufacturer:	Canon Inc., 30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo 146-8501, Japan		
Supplier:	Canon USA, Inc. One Canon Park, Melville, NY 11747, USA		
Phone #:	1-800-OK-CANON	24 Hr. Emergency CHEMTREC # 1-800-424-9300	
MSDS #:	TC0307-0202		
MSDS #: SECTION 2		ATION ON INGREDIENTS	

Hazardous Ingredient(s)

Chemical Name	CAS #	Weight %	EU Symbol	EU R-Phrase
Titanium dioxide	13463-67-7	<2	None	None

Chemical Name	USA OSHA PEL	ACGIH TLV
Titanium dioxide	15mg/m3 (Total dust:TWA)	10mg/m3(TWA)

Chemical Name	EU ILV	DFG MAK
Titanium dioxide	Not established	1.5mg/m3
		(respirable fraction)



SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS - Continued

Carcinogen		
Chemical Name	CAS #	Reference
No component of this toner is listed as human carcinogen or potential carcinogen in IARC Monographs, NTP, OSHA regulations or Annex I to Directive 67/548/EEC.		
Other Ingredient(s)		
Chemical/Generic Name		Weight %
Polyester resin Pigment		85-95 3-7

SECTION 3 HAZARDS IDENTIFICATION

Emergency Magenta fine powder, slight plastic odor. Overview:

Potential Health Eff	fects and Symptoms:
Inhalation:	Exposure to excessive amounts of dust may cause physical irritation to respiratory tract.
Ingestion:	Practically non-toxic. 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 Condition	ons Generally known to be Aggravated by Exposure: Not determined.



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SECTION 4 FIRST AID MEASURES

First Aid Measu Inhalation:	res: 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:	CO ₂ ,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 Proper	ties:
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))

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SECTION 5 FIRE FIGHTING MEASURES - Continued

Fire and Explosive Proper	rties - Continued:
Autoflammability:	Not applicable
Explosive Properties:	Can form explosive dust-air mixtures when finely dispersed in air.
Oxidizing Properties:	Not available
Hazardous Combustion Products:	CO ₂ ,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 HAN	DLING AND STORAGE
Handling:	Avoid breathing dust. Use with adequate ventilation.

Storage:

Keep out of the reach of children. Keep away from oxidizing materials.

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SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:	SA OSHA(TWA/PEL):15mg/m3 (Total dust)		
		5mg/m3 (Respirable fraction)	
	ACGIH(TWA/TLV):	10mg/m3 (Inhalable particulate)	
		3mg/m3 (Respirable particulate)	
	DFG (MAK) :	4 mg/m3 (Inhalable fraction)	
		1.5 mg/m3 (Respirable fraction) (Also refer to SECTION 2)	

Engineering Controls: Use adequate ventilation.

Personal Protection Ed	quipment(s):	
Respiratory Protection:	Required	Not Required
Eye/Face Protection:	Required	⊠ Not Required
Skin Protection:	Required	Not Required

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

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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(°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))	
Autoflammability:	Not applicable	
Explosive Properties:	Can form explosive dust-air mixtures when finely dispersed in air.	
Oxidizing Properties:	Not available	
Vapor Pressure:	Not applicable	
Vapor Density:	Not applicable	
Density / Specific Gravity:	1.0-1.4	
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	



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SECTION 10 STABILITY AND REACTIVITY

Stability:	🗙 Stable 🗌 Unstable	
Conditions to Avoid	None	
Materials to Avoid:	Strong oxidizers	
Hazardous Decompo Products:	ion $\overline{\text{CO}, \text{CO}_2}$	
Hazardous Polymeriz	ion: 🗌 May Occur 🛛 Will No	t Occur
Conditions to Avo		
SECTION 11 TO	COLOGICAL INFORMATION	
Acute Toxicity:		
Inhalation:	lot available	
Ingestion:	stimate:Rat, LD50 > 5000mg/kg	
_		
Eye:	Estimate:Rabbit, transient slight conjunctival irritation only.	
Skin:	Estimate:Rabbit, non irritant.	
Sensitization:	lot available	
Sensitization:	iot available	
Mutagenicity	mes Test (Salmonella typhimuriu	m) · Negative
Mutagenicity:	anco rest (sannonena typninnuriu	n). Negauve
Danroductiva	lot available	
Reproductive Toxicity:		



Others:

SECTION 11 TOXICOLOGICAL INFORMATION - Continued

Carcinogenicity: Not available

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.

SECTION 12 ECOLOGICAL INFORMATION

Mobility:	Not available
Persistence / Degradability:	Not available
Bioaccumulation:	Not available
Ecotoxicity:	Not available
Other Adverse Effects:	Not available

SECTION 13 DISPOSAL CONSIDERATION

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

SECTION 14 TRANSPORT INFORMATION

UN #:	None
UN Shipping Name:	None
UN Classification:	None
UN Packing Group:	None
Special Precautions:	None

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SECTION 15 REGULATORY INFORMATION

EU Information: Information on the Label:					
Symbol &	Not required				
Indication: R-Phrase:	Not required				
S-Phrase:	Not required				
Dangerous Component(s):	None				
Specific Provisions in Relation to Protection of Man or the Environment:					
76/769/EEC:	Not regulated				
(EC)2037/2000:	Not required				
(EEC)2455/92:	Not required				
Others:	None				
USA Information: Information on the L	abel				
Signal Word:	Not required				
Hazard warning:	Not required				
Safety Advice:	Not required				
Hazardous Component(s):	None				
SARA Title III §313 Chemical Nat		Weight %			
Chromium(III) (As Cr(III) me	and compounds tal)	5wt%(Max) (0.5wt%(Max))			
California Propositi Chemical Nar		Weight %			
None					

SECTION 16 OTHER INFORMATION

Other Information:

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None

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, 88/379/EEC
- EU Regulation (EC)2037/2000, (EEC)2455/92

Abbreviations:

"EU" stands for European Union.

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

"FHSA" stands for Federal Hazardous Substances Act.

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