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MATERIAL SAFETY DATA SHEET

MSDS #: TC1448-0103 Product Code: 1658B / R84-9022

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE

COMPANY/UNDERTAKING

Product Name: Canon Cartridge 111 Magenta

Product Code: 1658B / R84-9022

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

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

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

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

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 Pigment Amorphous silica	Confidential Confidential 7631-86-9/ 231-545-4	5-15 1-6 1-2	None/ None None/ None None/ None	Not established Not established 20 mppcf, 80(mg/m³)/%SiO ₂	Not established Not established Not established	Not established Not established Not established	Not established Not established 4 mg/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 based on animal testing. 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



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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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SECTION 8 EXPOSE	URE CONTR	OLS / PERSONAL PROTECTION				
Exposure Guidelines: USA OSHA PEL (TWA):	15 mg/m³ (Tot	al dust), 5 mg/m³ (Respirable fraction)				
ACGIH TLV (TWA): 10 mg/m³ (Inhalable fraction), 3 mg/m³ (Respirable fraction)						
DFG (MAK): 4 mg/m³ (Inhalable fraction), 1.5 mg/m³ (Respirable fraction) (Also refer to SECTION 2)						
Engineering Controls:	<u> </u>					
Use adequate ventilation.						
Personal Protection Equipment(s):						
Respiratory Protection: ☐ Required Not Required						
Eye/Face Protection:	Eye/Face Protection: ☐ Required ☐ Not Required					
Skin Protection:						
	M Not Kequ	neu				
SECTION 9 PHYSIC	AL AND CH	EMICAL PROPERTIES				
Appearance:		Magenta fine powder				
Odor:		Slight plastic odor				
pH:		Not applicable				
Boiling Point/Range($^{\circ}$ C):		Not applicable				
Melting Point/Range(°C):		100-150 (Softening point)				
$\label{eq:Decomposition} \textbf{Decomposition Temperature}(^{\circ}\textbf{C}) \textbf{:}$		> 200				
Flash Point(°C):		Not applicable				
Flammable (Explosive) Lim	its:	Not applicable				
Autoignition Temperature (${}^{\circ}C$):		Not available				
Flammability:		Not-flammable (Test method: Directive 92/69/EEC, A10 Flammability (Solids))				
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:		1.0-1.2				
Water Solubility:		Negligible				
Fat Solubility:		Partially soluble in toluene and xylene.				
$\label{partition} \textbf{Partition Coefficient (n-Octanol/Water):}$		Not applicable				
Percent Volatile:		Negligible				
Evaporation Rate:		Not applicable				
Viscosity (mPa s):		Not applicable				

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SECTION 10 STABILITY AND	REACTIVITY			
Stability:	Stable Unstable			
Conditions to Avoid:	None			
Materials to Avoid:	Strong oxidizers			
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: Rat, LD50 > 2000 mg/kg				
Eye: Rabbit, transient slight conjuncti	val irritation only.			
Skin: Rabbit, non-irritant				
Sensitization: Not available				
Mutagenicity: Ames Test (S. typhimurium, E. c	coli): Negative			
Reproductive Toxicity: Not available				
Carcinogenicity: Not available				
Others:				
respirable-sized particles compar most relevant to potential human	response upon chronic inhalation exposure in rats to a toner enriched in red to commercial toner. No pulmonary change was found at 1 mg/m³ which is exposure. A minimal to mild degree of fibrosis was noted in 22% of the animals at 16 mg/m³. These			

at 4 mg/m², and a mild to moderate degree of fibrosis was observed in 92% of the animals at 16 mg/m². 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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SECTION 12 EC	COLOGICAL INFORMATION				
Mobility:	Not available				
Persistence / Degrada	bility: Not available				
Bioaccumulation:	Not available				
Ecotoxicity:	Fish (Rainbow trout), 96h LL50 > 1000 mg/l (WAF) Crustaceans (Daphnia magna), 48h EL50 > 1000 mg/l (WAF) Algae (Scenedesmus subspicatus), EbL50(72h), ErL50(0-72h) > 1000 mg/l (WAF)				
Other Adverse Effects	Not available				
SECTION 13 DIS	SPOSAL CONSIDERATIONS				
container, unless du	or toner container into fire; heated toner may cause severe burns. DO NOT shred a toner st-explosion preventing measures are taken. Finely dispersed particles form explosive mixtures ald be subject to federal, state and local laws.				
SECTION 14 TR	RANSPORT INFORMATION				
UN #: <u>N</u>	None				
UN Shipping Name: <u>N</u>	None				
UN Classification: \underline{N}	None				
UN Packing Group: N	None				
D	☐ Yes Chemical name (wt%): ☑ No				
Special Precautions: N	None				
SECTION 15 RE	EGULATORY INFORMATION				
< EU Information >					
Information on the L					
Symbol & Indicat	Not required				
R-Phrase: Not required					
S-Phrase: Not required					
Dangerous Compo	onent(s):				
Special Precaution Not required	ns under 1999/45/EC Annex V:				
-	n Relation to Protection of Man or the Environment:				
(EC)2037/2000: N	Not regulated				
_					
_	Tot regulated Tone				

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MSDS #: TC1448-0103 Product Code: 1658B / R84-9022

< USA Information >

Information on the Label under OSHA:

Signal Word: Not required

Hazard warning:

Not required

Safety Advice: Not required

Hazardous Component(s):

Not required

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

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, 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]

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Abbreviations:

EU: European Union.

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 ILV: Indicative Limit Values for Occupational Exposure under EU Directive 91/322/EEC, 2000/39/EC and 2006/15/EC.

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

TWA: Time Weighted Average. STEL: Short Term Exposure Limit.

IARC: International Agency for Research on Cancer.

NTP: National Toxicology Program (USA).

WAF: Water Accommodated Fraction

LL: Lethal Loading rate EL: Effective Loading rate

OSHA HCS: Occupational Safety and Health Act, Hazard Communication Standard (USA).

FHSA: Federal Hazardous Substances Act (USA).

WHMIS: Workplace Hazardous Materials Information System. NOHSC: National Occupational Health and Safety Commission.

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