

MATERIAL SAFETY DATA SHEET

MSDS #: TC1337-0102 Product Code: 9424A / R84-8024

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE

COMPANY/UNDERTAKING

Product Name: Canon Cartridge 707 Black for Laser Beam Printer

Product Code: 9424A / R84-8024
Company Name: Canon Europa N.V.

Address: Bovenkerkerweg 59-61, 1185XB, Amstelveen, The Netherlands

Use of the Product: Toner for electrophotographic apparatus

< 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	5-15	None/ None	Not established	Not established	Not established	Not established
Carbon black	1333-86-4/ 215-609-9	1-6	None/ None	3.5 mg/m³ (TWA)	3.5 mg/m³ (TWA)	Not established	Not established
Amorphous silica	7631-86-9/ 231-545-4	1-2	None/ None	20 mppcf, 80(mg/m³)/%SiO ₂	10 mg/m³ (TWA)	Not established	4 mg/m³ (Inhalable fraction)

< Carcinogen >

Chemical NameCAS #ReferenceCarbon Black (1-6%)1333-86-4IARC: Group 2B. NTP; OSHA; Annex I to

67/548/EEC: Not listed.

SECTION 3 HAZARDS IDENTIFICATION

EU Classification:

Not classified as dangerous.

Emergency Overview:

Black 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

Date of Issue: August 12, 2005

Revised:



MATERIAL SAFETY DATA SHEET

Page 2 of 6 TC1337-0102

MSDS #: TC1337-0102 Product Code: 9424A / R84-8024

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.

Page 3 of 6



MATERIAL SAFETY DATA SHEET

MSDS #: TC1337-0102 Product Code: 9424A / R84-8024

SECTION 8 EXPOSURE CONTR Exposure Guidelines:	OLS / PERSONAL PROTECTION							
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): 4 mg/m³ (Inhalable fraction), 1.5 mg/m³ (Respirable fraction) (Also refer to SECTION 2)								
Engineering Controls: Use adequate ventilation.								
Personal Protection Equipment(s):								
Respiratory Protection: ☐ Required Not Required								
Eye/Face Protection: ☐ Required ☐ Not Required								
Skin Protection: ☐ Required ☐ Not Required								
SECTION 9 PHYSICAL AND CH	EMICAL PROPERTIES							
Appearance:	Black 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))							
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.							
Partition Coefficient (n-Octanol/Water):	Not applicable							
Percent Volatile:	Negligible							
Evaporation Rate:	Not applicable							
Viscosity (mPa s):	Not applicable							

Page 4 of 6



MATERIAL SAFETY DATA SHEET

MSDS #: TC1337-0102 Product Code: 9424A / R84-8024

SECTION 10 STABILITY AND	REACTIVITY
Stability:	Stable Unstable 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 conjunctive	val irritation only.
Skin: Rabbit, non-irritant	
Sensitization: Not available	
Mutagenicity: Ames Test (S. typhimurium, E. c	oli): Negative
Reproductive Toxicity: Not available	
Carcinogenicity:	

The IARC evaluated carbon black as a Group 2B carcinogen, for which there is inadequate human evidence, but sufficient animal evidence. The latter is based upon the development of lung tumors in rats receiving chronic inhalation exposure to powdered carbon black at levels that induce particle overload of the lung. However, there is a two-year inhalation study of a toner containing carbon black which demonstrated no association between toner exposure and tumor development in rats.

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/m^3 , and a mild to moderate degree of fibrosis was observed in 92% of the animals at 16 mg/m^3 .

These findings are attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lung for a prolonged interval.

Page 5 of 6



MATERIAL SAFETY DATA SHEET

MSDS #: TC1337-0102 Product Code: 9424A / R84-8024

SECTION 12 E	COLOGI	CAL INFORMATION				
Mobility:]	Not available				
Persistence / Degrad	lability:]	Not available				
Bioaccumulation:]	Not available				
Ecotoxicity:]	Not available				
Other Adverse Effects:		Not available				
SECTION 13 D	ISPOSAI	CONSIDERATIONS				
Method of Disposal: DO NOT put toner container, unless d	r or toner o	container into fire; heated toner may cause severe burns. DO NOT shred a toner ion preventing measures are taken. Finely dispersed particles form explosive mixtures bject to federal, state and local laws.				
SECTION 14 T	CRANSPO	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	REGULAT	TORY INFORMATION				
< EU Information >						
Information on the Symbol & Indica		required				
R-Phrase: Not required						
S-Phrase: Not required						
Dangerous Com Not required	ponent(s):					
Special Precaution Not required	ons under	1999/45/EC Annex V:				
-		on to Protection of Man or the Environment:				
76/769/EEC:	Not regula	ated				
(EC)2037/2000:	Not regula	ated				
(EC)304/2003:	Not regulated					
Others:	None					
< USA Information >	>					
Information on the	Label:					
Signal Word:	Not required					
Hazard warning: Not required						



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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]

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 and 2000/39/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).

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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