

MATERIAL SAFETY DATA SHEET

SECTION 1IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE
COMPANY/UNDERTAKINGProduct Name:Canon Toner Cartridge G Black for Laser Beam Printer/CopierProduct Code:1515A / F42-3601Company Name:Canon Europa N.V.Address:Bovenkerkerweg 59-61, 1185 XB, Amstelveen, The Netherlands

Use of the Product:

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

Toner for electrophotographic apparatus

< Ingredient(s) > Chemical Name / Generic Name	CAS # / EC #	Weight %	EU Symbol/ R-Phrase	USA OSHA PEL	ACGIH TLV	EUILV	DFG MAK
Styrene acrylate copolymer	Confidential	45-55	None/ None	Not established	Not established	Not established	Not established
Iron oxide	1317-61-9/ 215-277-5	45-55	None/ None	Not established	Not established	Not established	Not established
Amorphous silica	7631-86-9/ 231-545-4	1-2	None/ None	20 mppcf, 80(mg/m ³)/%SiO ₂	Not established	Not established	4 mg/m ³ (Inhalable fraction)

CAS#

Reference

< Carcinogen >

Chemical Name

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:

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 cause 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.

Medical Conditions Generally known to be Aggravated by Exposure:

Not determined



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.



SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

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 CHEMICAL 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:	1.4-1.8
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



SECTION 10 STABILITY AND	REACTIVITY		
Stability:	X Stable □ Unstable		
Conditions to Avoid:	None		
Materials to Avoid:	Strong oxidizers CO, CO2		
Hazardous Decomposition Products:			
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 conjunctiv	val irritation only.		
Skin: Rabbit, mild irritant			
Sensitization: Guinea pig, skin: Non-sensitizing	g		
Mutagenicity: Ames Test (S. typhimurium, E. c	coli): Negative		
Reproductive Toxicity: Not available			
Carcinogenicity: Not available			
respirable-sized particles compar most relevant to potential human at 4 mg/m ³ , and a mild to modera	response upon chronic inhalation exposure in rats to a toner enriched in red to commercial toner. No pulmonary change was found at 1 mg/m ³ which is exposure. A minimal to mild degree of fibrosis was noted in 22% of the animals at degree of fibrosis was observed in 92% of the animals at 16 mg/m ³ . These verloading", a generic response to excessive amounts of any dust retained in the		

lung for a prolonged interval.



SECTION 12 ECOLOG	GICAL INFORMATION	
Mobility:	Not available	
Persistence / Degradability:	egradability: Not available	
Bioaccumulation:	Not available	
Ecotoxicity:	Estimate: Fish (Rainbow trout), 96h LL50 > 1000 mg/l (WAF) Estimate: Crustaceans (Daphnia magna), 48h EL50 > 1000 mg/l (WAF) Estimate: Algae (Scenedesmus subspicatus), EbL50(72h), ErL50(0-72h) > 1000 mg/l (WAF)(See SECTION 16)	
Other Adverse Effects:	Not available	

SECTION 13 DISPOSAL CONSIDERATIONS

Method of Disposal:

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	FRANSPORT INFORMATION			
UN #:	2807			
UN Shipping Name: Magnetized material				
UN Classification:	9			
UN Packing Group	None			
Marine Pollutant:	☐ Yes Chemical name (wt%): ☑ No			
Special Precautions	: 7 or more of these products shipped together, by air, are regulated as magnetized material.			
SECTION 15	REGULATORY INFORMATION			
< EU Information >				
Information on the				
Symbol & Indic	ation: Not required			
R-Phrase: Not required				
S-Phrase:				
Not required				
Dangerous Com Not required	aponent(s):			
Special Precauti Not required	ions under 1999/45/EC Annex V:			
Specific Provisions	in Relation to Protection of Man or the Environment:			
76/769/EEC:	Not regulated			
(EC)2037/2000:	Not regulated			
(EC)304/2003:	Not regulated			
Others:	None			



< USA Information >

Information on the	Label under O	SHA:	
Signal Word:	Not required		
Hazard warning	g:		
Not required			
Safety Advice:			
Not required			
Hazardous Com	ponent(s):		
Not required			
SARA Title III §31	13:		
Chemical Na	ime		Weight %
None			
California Proposi	tion 65:		
Chemical Na	ime		Weight %
None			
< Canada Informati	on >		
WHMIS Controlle	d Product:	Not applicable (Manufactured article)	
< Australia Informa	tion >		
Statement of Hazardous Nature: Not classified as hazardous according to criteria of NOI		of NOHSC.	

SECTION 16 OTHER INFORMATION

Revised information from the previous version: SECTION 2 and 12 Estimate: Estimate based on test data on similar toner/developer/drum and/or the raw materials 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
 - 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]

Canon

Abbreviations:

EU: European Union.

Defended Onton.
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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