

MSDS #:

Product Code:

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SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE

COMPANY/UNDERTAKING

Product Name: Canon NPG-47 Magenta Toner

Product Code:2799BSupplier: Canon Singapore Pte LtdCompany Name:1 HarbourFront Avenue,
#04-01, Keppel Bay Tower,

Address: 30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo 146-8501, Japan Singapore 098632

Use of the Product: Toner for electrophotographic apparatus ______cspl_msds@canon.com.sg

SECTION 2 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.

COMPOSITION/INFORMATION ON INGREDIENTS

None/ None

Eye:

May cause transient slight irritation.

Skin:

SECTION 3

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

< Ingredient(s) > Chemical Name / Generic Name	CAS # / EC #	Weight	EU Symbol/ R-Phrase	USA OSHA PEL	ACGIH TLV	EU ILV	DFG MAK
Polyester resin	Confidential	80-90	None/ None	Not established	Not established	Not established	Not established
Pigment	Confidential	5-10	None/ None	Not established	Not established	Not established	Not established

20 mppcf,

 $80 \text{ (mg/m}^3)/\% \text{SiO}_{2}$

Not established

Not established

 4 mg/m^3

(Inhalable fraction)

< Carcinogen >

Amorphous silica

No component of this toner is listed as a human carcinogen or a potential carcinogen in IARC Monographs, NTP, OSHA regulations or Part 3 of Annex VI to Regulation (EC) 1272/2008.

< PBT substance and vPvB substance >

7631-86-9/

231-545-4

No component of this toner is a PBT or vPvB subtance under Regulation (EC) No 1907/2006.

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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 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:						
USA OSHA PEL (TWA): 15 mg/m ³	(Total dust), 5 mg/m³ (Respirable fraction)					
ACGIH TLV (TWA): 10 mg/m ³ (Inhalable fraction), 3 mg/m ³ (Respirable fraction) DFG MAK: 4 mg/m ³ (Inhalable fraction), 1.5 mg/m ³ (Respirable fraction)						
(Also refer to SECTION 3)						
Engineering Controls:						
Use adequate ventilation.						
Personal Protection Equipment(s):						
Respiratory Protection: ☐ Require ☐ Not Req						
Eye/Face Protection: ☐ Required Not Req						
Skin Protection: Required Not Required						
SECTION 9 PHYSICAL AND C	HEMICAL PROPERTIES					
Appearance:	Magenta fine powder					
Odor:	Slight plastic odor					
pH:	Not applicable					
Boiling Point/Range(°C):	Not applicable					
Melting Point/Range(°C):	85-120 (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:	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:	1.0-1.5					
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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SECTION 10 STABILITY	AND REACTIVITY				
Stability:	Stable ☐ Unstable				
Conditions to Avoid:	None				
Materials to Avoid:	Strong oxidizers				
Hazardous Decomposition Prod	lucts: CO, CO2				
Hazardous Polymerization:	☐ May Occur ☑ Will Not Occur				
Conditions to Avoid:	None				
SECTION 11 TOXICOLO	GICAL INFORMATION				
Acute Toxicity: Inhalation: Not available					
Ingestion: Estimate: Rat, LD50 > 200	00 mg/kg (See SECTION 16)				
Eye: <u>Estimate: Rabbit, transient</u>	slight conjunctival irritation only. (See SECTION 16)				
Skin: Estimate: Rabbit, non-irrit	ant (See SECTION 16)				
Sensitization: Estimate: skin: Non-sensit	izing (See SECTION 16)				
Mutagenicity: Ames Test (S. typhimurium	m, E. coli): 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/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.

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SECTION 12 ECOLO	GICAL INFORMATION			
Mobility:	Not available			
Persistence / Degradability:	Not available			
Bioaccumulation:	Not available			
Ecotoxicity:	Estimate: Fish, 96h LC50 > 100 mg/l, Estimate: Crustaceans, 48h EC50 > 100 mg/l, Estimate: Algae, ErC50(0-72h) > 100 mg/L (See SECTION 16)			
Other Adverse Effects:	Not available			
SECTION 13 DISPOSA	AL CONSIDERATIONS			
container, unless dust-exp	er container into fire; heated toner may cause severe burns. DO NOT shred a toner closion preventing measures are taken. Finely dispersed particles form explosive chould be subject to federal, state and local laws.			
SECTION 14 TRANSI	PORT 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 REGULA	ATORY INFORMATION			
< EU Information >				
Information on the Label:				
Symbol & Indication: N	ot required			
R-Phrase:				
Not required S-Phrase:				
Not required				
Dangerous Component(s): Not required				
Special Precautions und Not required	er 1999/45/EC Annex V:			
Specific Provisions in Rela	tion to Protection of Man or the Environment:			
(EC) No 1907/2006 Ann	ex XVII (Restrictions):			
Not reg	ulated			
(EC) No 2037/2000:				
Not reg	ulated			
(EC) No 689/2008: Not reg	ulated			
Others: None				

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< 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

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 (EC) No 1907/2006 Annex XVII (Restrictions), 1999/45/EC
- $-\;EU\;Regulation\;(EC)\;No\;2037/2000,\;(EC)\;No\;689/2008,\;(EC)\;No\;1907/2006,\;(EC)\;No\;1272/2008$
- 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).

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.

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

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