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MATERIAL SAFETY DATA SHEET Product Code: 1375A / F41-8001

IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE **SECTION 1** 

COMPANY/UNDERTAKING

**Product Name:** Canon NPG-4 Black Toner for NP Copier

**Product Code:** 1375A / F41-8001

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

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

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

**SECTION 2** 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:**

Practically non-toxic 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

#### COMPOSITION/INFORMATION ON INGREDIENTS **SECTION 3**

< Ingredient(s) > Chemical Name / Generic Name	CAS # / EC #	Weight	EU Symbol/ R-Phrase	USA OSHA PEL	ACGIH TLV	EU ILV	DFG MAK
Iron oxide	1317-61-9/ 215-277-5	40-50	None/ None	Not established	Not established	Not established	Not established
Styrene acrylate copolymer	Confidential	35-45	None/ None	Not established	Not established	Not established	Not established
Styrene polymer	Confidential	5-15	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 <sup>3</sup> )/%SiO <sub>2</sub>	Not established	Not established	4mg/m <sup>3</sup> (Inhalable fraction)

#### < Carcinogen >

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.

### < PBT substance and vPvB substance >

No component of this toner is a PBT or vPvB subtance under Regulation (EC)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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#### EXPOSURE CONTROLS / PERSONAL PROTECTION SECTION 8

SECTION 6 EAFOSURE CONTR	OLS / FERSONAL FROTECTION						
<b>Exposure Guidelines:</b>							
USA OSHA PEL (TWA): 15 mg/m <sup>3</sup> (*	Total dust), 5 mg/m <sup>3</sup> (Respirable fraction)						
	nhalable fraction), 3 mg/m <sup>3</sup> (Respirable fraction)						
DFG (MAK): 4 mg/m <sup>3</sup> (Inhalable fraction), 1.5 mg/m <sup>3</sup> (Respirable fraction) (Also refer to SECTION 3)							
Engineering Controls:							
Use adequate ventilation.							
<b>Personal Protection Equipment(s):</b>							
Respiratory Protection: Required Mot Required							
Eye/Face Protection: Required  Not Required							
Skin Protection: Required							
Not Requ	ured						
SECTION 9 PHYSICAL AND CH	EMICAL PROPERTIES						
Appearance:	Black fine powder						
Odor:	Slight plastic odor						
pH:	Not applicable						
<b>Boiling Point/Range(°C):</b>	Not applicable						
<b>Melting Point/Range(°C):</b>	100-150 (Softening point)						
<b>Decomposition Temperature</b> ( ${}^{\circ}$ C):	> 200						
Flash Point(°C):	Not applicable						
Flammable (Explosive) Limits:	Not applicable						
<b>Autoignition Temperature(°C):</b>	Not available						
Flammability:	Not-flammable (Test method: Directive 92/69/EEC, A10 Flammability (Solids))						
<b>Explosive Properties:</b>	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:	1.4-1.6						
Water Solubility:	Negligible						
Fat Solubility:	Partially soluble in toluene and xylene.						
Partition Coefficient (n-Octanol/Water):	Not applicable						
Percent Volatile:	Negligible						
<b>Evaporation Rate:</b>	Not applicable						
Viscosity (mPa s):	Not applicable						

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MATERIAL SAFETY DATA SHEET Product Code: 1375A / F41-8001 **SECTION 10** STABILITY AND REACTIVITY ■ Stable **Stability:** ☐ 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: SECTION 11** TOXICOLOGICAL INFORMATION **Acute Toxicity: Inhalation:** Not available **Ingestion:** Rat, LD50 > 5000 mg/kgEye: Rabbit, transient slight conjunctival irritation only. Skin: Rabbit, non-irritant **Sensitization:** Estimate: Guinea pig, skin: Non-sensitizing (See SECTION 16) **Mutagenicity:** Ames Test (Salmonella typhimurium): Negative **Reproductive Toxicity:** Not available

## Others:

Carcinogenicity:

Chronic effects:

Not available

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/m<sup>3</sup> 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<sup>3</sup>, and a mild to moderate degree of fibrosis was observed in 92% of the animals at 16 mg/m<sup>3</sup>. 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 E	COLOG	GICAL INFORMATION				
<b>Mobility:</b>		Not available				
Persistence / Degradability: Bioaccumulation:		Not available				
		Not available				
Ecotoxicity:		Estimate: Fish, 96h LL50 > 1000 mg/l (WAF) Estimate: Crustaceans, 48h EL50 > 1000 mg/l (WAF) Estimate: Algae, EbL50(72h), ErL50(0-72h) > 1000 mg/l (WAF) (See SECTION 16)				
Other Adverse Effects:		Not available				
SECTION 13 D	ISPOSA	L CONSIDERATIONS				
container, unless of	r or tone dust-expl	r container into fire; heated toner may cause severe burns. DO NOT shred a toner losion preventing measures are taken. Finely dispersed particles form explosive hould be subject to federal, state and local laws.				
SECTION 14 T	RANSP	ORT INFORMATION				
UN #:	None					
<b>UN Shipping Name:</b>	UN Shipping Name: None					
<b>UN Classification:</b>	None					
<b>UN Packing Group:</b>	None					
Marine Pollutant:  Yes Chemical name (wt%):						
Special Precautions: None						
SECTION 15 R	EGULA	ATORY INFORMATION				
< EU Information > Information on the Symbol & Indica		ot required				
R-Phrase:	111011. 1N	n required				
Not required						
S-Phrase: Not required						
Dangerous Comp Not required	ponent(s	s):				
Special Precaution  Not required	ons unde	er 1999/45/EC Annex V:				
•	in Relat	tion to Protection of Man or the Environment:				
(EC)2037/2000:		~				
		Not regulated				
	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 a controlled product

< Australia Information >

**Statement of Hazardous Nature:** Not classified as hazardous according to criteria of NOHSC.

### SECTION 16 OTHER INFORMATION

Revised information from the previous version: SECTION 2, 3, 8, 9, 11, 12 and 15

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, (EC)1907/2006
- 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.

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

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