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## MATERIAL SAFETY DATA SHEET

MSDS #: TC1186-0102 Product Code: 1559A / H11-6431

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE

**COMPANY/UNDERTAKING** 

Product Name: Canon FX6 Cartridge

**Product Code:** 1559A / H11-6431

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

Supplier: Canon USA, Inc.,One Canon Plaza, Lake Success, NY, 11042, USA

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

# SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

< 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	40-50	None/ None	Not established	Not established	Not established	Not established
Iron oxide	1317-61-9/ 215-277-5	40-50	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/m³)/%SiO <sub>2</sub>	10 mg/m³ (TWA)	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:**

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. 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



## MATERIAL SAFETY DATA SHEET

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MSDS #: TC1186-0102 Product Code: 1559A / H11-6431

#### 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 EXPOSU Exposure Guidelines:	JRE CONTR	OLS / PERSONAL PROTECTION			
USA OSHA PEL (TWA): ACGIH TLV (TWA): DFG (MAK): (Also refer to SECTION 2	10 mg/m³ (Inh 4 mg/m³ (Inh	otal dust), 5 mg/m³ (Respirable fraction) halable fraction), 3 mg/m³ (Respirable fraction) halable fraction), 1.5 mg/m³ (Respirable fraction)			
Engineering Controls: Use adequate ventilation.					
<b>Personal Protection Equipm</b>	ent(s):				
Respiratory Protection:	☐ Required  Not Required	ired			
<b>Eye/Face Protection:</b>	☐ Required  Not Required				
Skin Protection:	☐ Required  Not Required				
SECTION 9 PHYSIC	AL AND CH	EMICAL PROPERTIES			
Appearance:		Black fine powder			
Odor:		Slight plastic odor			
pH:		Not applicable			
<b>Boiling Point/Range(°C):</b>		Not applicable			
Melting Point/Range(°C):		100 - 150 (Softening point)			
<b>Decomposition Temperature</b> ( ${}^{\circ}$ C):		> 200			
Flash Point(°C):		Not applicable			
Flammable (Explosive) Limits:		Not applicable			
<b>Autoignition Temperature</b> (°	<b>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 - 1.8			
Water Solubility:		Negligible			
Fat Solubility:		Partially soluble in toluene and xylene.			
<b>Partition Coefficient (n-Octanol/Water):</b>		Not applicable			
Percent Volatile:		Negligible			
<b>Evaporation Rate:</b>		Not applicable			
Viscosity (mPa s):		Not applicable			

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MSDS #: TC1186-0102 Product Code: 1559A / H11-6431

SECTION 10 STABILITY AND	REACTIVITY				
Stability:					
Conditions to Avoid:	None				
Materials to Avoid:	Strong oxidizers				
<b>Hazardous Decomposition Products:</b>	CO, CO2				
Hazardous Polymerization:	☐ May Occur  ☑ Will Not Occur				
Conditions to Avoid:	None				
SECTION 11 TOXICOLOGICA	AL INFORMATION				
Acute Toxicity: Inhalation: Not available					
<b>Ingestion:</b> Estimate: Rat, LD50 > 2000 mg/	/kg (See Section 16)				
Eye: Estimate: Rabbit, transient slight	conjunctival irritation only. (See Section 16)				
Skin: Estimate: Rabbit, non-irritant (Se	ee Section 16)				
Sensitization: Estimate: Guinea pig, skin: Non-	-sensitizing (See Section 16)				
Mutagenicity: Estimate: Ames Test (S. typhimu	urium, E. coli): Negative (See Section 16)				
Reproductive Toxicity:  Not available					
Carcinogenicity: Not available					
respirable-sized particles compar	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				

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  $1~\text{mg/m}^3$  which is most relevant to potential human exposure. A minimal to mild degree of fibrosis was noted in 22% of the animals at  $4~\text{mg/m}^3$ , and a mild to moderate degree of fibrosis was observed in 92% of the animals at  $16~\text{mg/m}^3$ . 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 E	COLOG	ICAL INFORMATION					
<b>Mobility:</b>		Not available					
Persistence / Degradability:		Not available					
Bioaccumulation:		Not available					
<b>Ecotoxicity:</b>		Not available					
Other Adverse Effec	ets:	Not available					
SECTION 13 D	ICDOCA	L CONSIDERATION					
Method of Disposal: DO NOT put tone container, unless d	r or toner lust-explo	container into fire; heated toner may cause severe burns. DO NOT shred a toner sion preventing measures are taken. Finely dispersed particles form explosive mixtures ubject to federal, state and local laws.					
SECTION 14 T	RANSP	ORT INFORMATION					
UN #:	2807	O-1-1 - 1-1 O-1-1-1-1-1-1-1-1					
UN Shipping Name:		zed material					
UN Classification:	9	and material					
UN Packing Group:							
Marine Pollutant:	☐ Yes  No	Chemical name (wt%):					
<b>Special Precautions:</b>		ore of these products shipped together, by air, are regulated as magnetized material.					
SECTION 15 R	REGULA	TORY INFORMATION					
< EU Information $>$							
Information on the Symbol & Indica		ot required					
R-Phrase: Not required		1					
S-Phrase: Not required							
Dangerous Com None	ponent(s	):					
Special Precaution Not required	ons unde	r 1999/45/EC Annex V:					
Specific Provisions 76/769/EEC:	in Relati Not regu	on to Protection of Man or the Environment:					
(EC)2037/2000:	Not regu	lated					
(EC)304/2003:	Not regu	lated					
Others:	None						
< USA Information >	>						
Information on the	Label:						
Signal Word:	Not requ	nired					
Hazard warning  Not required	:						



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**Safety Advice:** 

Not required

**Hazardous Component(s):** 

None

**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 on this product.

#### 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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