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# MATERIAL SAFETY DATA SHEET

MSDS #: TN1016-0303 Product Code: 1433A / F42-0421

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE

**COMPANY/UNDERTAKING** 

**Product Name:** Canon Toner (Magenta) for CLC700

Product Code: 1433A / F42-0421 Company Name: Canon Europa N.V.

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

Use of the Product: Toner for electrophotographic apparatus

# SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

<	Ingr	ed	ient(s	s) >	
	~-			,	

Chemical Name / Generic Name	CAS#/ EC#	Weight %	EU Symbol/ R-Phrase	USA OSHA PEL	ACGIH TLV	EU ILV	DFG MAK
Polyester resin	Confidential	85-95	None/ None	Not established	Not established	Not established	Not established
Pigment	Confidential	1-5	None/ None	Not established	Not established	Not established	Not established
Hydrogen bis[3,5-di-tert-butylsalicyl ato(2-)-O1,O2]chromate(1 -)	72869-85-3/ 276-955-4	1-4 (as Cr: 0.1-0.4)	Xn/ R22	Not established	Not established	Not established	Not established

## < 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:**

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.

### 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



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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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Viscosity (mPa s):

# **MATERIAL SAFETY DATA SHEET**

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**SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION Exposure Guidelines:** USA OSHA PEL (TWA): 15 mg/m³ (Total dust), 5 mg/m³ (Respirable fraction) 10 mg/m³ (Inhalable fraction), 3 mg/m³ (Respirable fraction) ACGIH TLV (TWA): DFG (MAK): 4 mg/m<sup>3</sup> (Inhalable fraction), 1.5 mg/m<sup>3</sup> (Respirable fraction) (Also refer to SECTION 2) **Engineering Controls:** Use adequate ventilation. **Personal Protection Equipment(s): Respiratory Protection:** 

Required ■ Not Required ☐ Required **Eye/Face Protection: ☒** Not Required **Skin Protection:** ☐ Required **☒** Not Required **SECTION 9** PHYSICAL AND CHEMICAL PROPERTIES Magenta fine powder Appearance: Odor: Slight plastic odor pH: Not applicable Boiling Point/Range(°C): Not applicable Melting Point/Range(°C): 85-120 (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 Not applicable Vapor Pressure: 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

Date of Issue: February 16, 1994 Revised: December 21, 2006

Not applicable

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Canon

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SECTION 10 STABILITY AND	REACTIVITY			
Stability:	Stable     Unstable			
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	t conjunctival irritation only. (See SECTION 16)			
Skin: Estimate: Rabbit, mild irritant (S	See SECTION 16)			
<b>Sensitization:</b> Guinea pig, skin: Non-sensitizing	g			
Mutagenicity: Ames Test (S. typhimurium): Ne	egative			
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			

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/m³. 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 EC	OLOGICAL INFORMATION				
Mobility:	Not available				
Persistence / Degrada	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 DIS	SPOSAL CONSIDERATIONS				
container, unless du	or toner container into fire; heated toner may cause severe burns. DO NOT shred a toner st-explosion preventing measures are taken. Finely dispersed particles form explosive mixtures all be subject to federal, state and local laws.				
SECTION 14 TR	RANSPORT INFORMATION				
UN #: <u>N</u>	Vone				
UN Shipping Name: N	Vone				
UN Classification: N	None				
UN Packing Group: N	None				
_	Yes Chemical name (wt%): No				
Special Precautions: N	None				
SECTION 15 RE	GULATORY INFORMATION				
< EU Information > Information on the I Symbol & Indicat R-Phrase: Not required					
S-Phrase: Not required					
Dangerous Compo	onent(s):				
=	s under 1999/45/EC Annex V: t available for professional user on request.				
	n Relation to Protection of Man or the Environment:  Not regulated				
(EC)2037/2000: N	Not regulated				
(EC)304/2003: N	Tot regulated				
Others: N	Ione				

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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 %

" Chromium(III) Compounds" 1-4
(as Cr) (0.1-0.4)

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

R-phrase list:

R22 - Harmful if swallowed.

Revised information from the previous version: Section 9, 11 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]

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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.

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