Canon

MSDS #: TN1029-0505

MATERIAL SAFETY DATA SHEET

Product Code: 1427A / F42-0411

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier:

Product Name: Canon Toner (Cyan) for CLC700

Product Code: 1427A / F42-0411

Relevant Identified Uses: Toner for electrophotographic apparatus

Details of Supplier of Safety Data Sheet:

Supplier: Canon, USA, Inc.

Address: One Canon Park, Melville, NY 11747, USA

Telephone Number: 1-800-OK-CANON

E-mail Address:

Emergency Telephone Number: 24 Hr. Emergency CHEMTREC # 1-800-424-9300

Manufacturer: Canon Inc.

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

SECTION 2 HAZARDS IDENTIFICATION

Emergency Overview: Cyan fine powder, slight plastic odor.

US Regulatory Status under OSHA HCS:

Not classified as hazardous.

US Label Elements under OSHA HCS:

Signal Word: Not required

Hazard Warning: Not required

Safety Advice: Not required

Hazardous Component: Not required

EU Classification under 1999/45/EC:

Not classified as dangerous.

EU Label Elements under 1999/45/EC:

Symbol & Indication: Not required

R-Phrase: Not required

S-Phrase: Not required

Dangerous Component: Not required

Applicable Label Elements in accordance with Annex V to 1999/45/EC:

Safety data sheet available for professional user on request.

Other Hazards: None

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SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Substance or Mixture: Mixture

Ingredient(s):

Chemical Name/ Generic Name	CAS #/ EC #	Concentration/ Concentration Range (%)	EU Classification according to 67/548/EEC		EU Classification according to (EC) No 1272/2008		Note to Other Hazards*2
			Symbol/ Indication of Danger	R-Phrase*1	Hazard Class/ Category Code	Hazard Statement*1	
Polyester resin	Confidential	85-95	None	None	None	None	
Pigment	Confidential	1-5 (as Cu: 0.1-0.5)	None	None	None	None	
Hydrogen bis[3,5-di-tert-butylsalicylato(2-)-O1, O2]chromate(1-)	72869-85-3/ 276-955-4	1-5 (as Cr: 0.1-0.5)	Xn/Harmful	R22	Acute Tox.4	H302	
Titanium dioxide	13463-67-7/ 236-675-5	< 1	None	None	None	None	(1)

*1 Full texts of R-phrase(s) and Hazard statement(s) are listed in SECTION 16

*2 The following substance(s) is (are) marked with (1), (2) and/or (3)

(1) Substance for which Occupational Exposure Limit(s) is (are) established (See SECTION 8)

(2) PBT substance or vPvB substance under Regulation (EC) No 1907/2006

(3) Substance listed in Candidate List of SVHC for Authorisation under Regulation (EC) No 1907/2006

Carcinogen(s)

Chemical Name	CAS#	Reference
Titanium dioxide (< 1%)	13463-67-7	IARC: Group 2B. NTP; OSHA; Part 3 of Annex VI to Regulation (EC) No 1272/2008: Not listed.

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.

Skin:

Wash with soap and water. If irritation persists, obtain medical advice.

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.

Most Important Symptoms and Effects, both Acute and Delayed:

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.

Skin:

May cause slight irritation.

Eye:

May cause transient 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.

Indication of Any Immediate Medical Attention and Special Treatment Needed:

None

SECTION 5 FIRE FIGHTING MEASURES

Extinguishing Media:

Suitable Extinguishing Media:

CO_2, water, dry chemicals

Unsuitable Extinguishing Media:

None

Special Hazards:

Can form explosive dust-air mixtures when finely dispersed in air.

Hazardous Combustion Products:

CO_2, CO

Advice for Fire-fighters:

Wear gloves, glasses, a mask if necessary.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Avoid breathing dust. Wash thoroughly after handling.

Environmental Precautions:

Do not wash away into sewer.

Methods and Material for Containment and 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.

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SECTION 7 HANDLING AND STORAGE

Precautions for Safe Handling:

Avoid breathing dust. Wash thoroughly after handling.
Use with adequate ventilation.

Conditions for Safe Storage, Including Any Incompatibilities:

Keep out of the reach of children.
Keep away from oxidizing materials.

Specific End Uses:

Toner for electrophotographic apparatus.
For more information, please refer to the instruction of this product.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters:

	USA OSHA PEL	ACGIH TLV	EU OEL	DFG MAK
Product (Toner)	PNOR: TWA 15 mg/m^3 (Total dust), TWA 5 mg/m^3 (Respirable fraction)	PNOS: TWA 10 mg/m^3 (Inhalable fraction), TWA 3 mg/m^3 (Respirable fraction)	Not established	Dust: 4 mg/m^3 (Inhalable fraction), 1.5 mg/m^3 (Respirable fraction)
Titanium dioxide	TWA 15 mg/m^3 (Total dust)	TWA 10 mg/m^3	Not established	Not established

Exposure Controls:

Engineering Controls:

No special ventilation equipment is needed under intended use of this product.

Individual Protection Measures:

Eye/Face Protection: ☐ Required ☒ Not Required

Skin Protection: ☐ Required ☒ Not Required

Respiratory Protection: ☐ Required ☒ Not Required

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SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties:

Appearance:	Cyan fine powder
Odor:	Slight plastic odor
pH:	Not applicable
Melting Point/Freezing Point (°C):	85-120 (Softening point)
Initial Boiling Point and Boiling Range (°C):	Not applicable
Flash Point(°C):	Not applicable
Evaporation Rate:	Not applicable
Flammability:	Estimate: Not-flammable (Test method: Directive 92/69/EEC, A10 Flammability (Solids)) (See SECTION 16)
Upper/Lower Flammable or Explosive Limits:	Not applicable
Vapor Pressure:	Not applicable
Vapor Density:	Not applicable
Relative Density:	1.0-1.5
Water Solubility:	Negligible
Fat Solubility:	Partially soluble in toluene and xylene.
Partition Coefficient (n-Octanol/Water):	Not applicable
Auto-ignition Temperature (°C):	Not available
Decomposition Temperature (°C):	> 200
Viscosity (mPa s):	Not applicable
Explosive Properties:	Can form explosive dust-air mixtures when finely dispersed in air.
Oxidizing Properties:	Not available
Other Information:	Not available

SECTION 10 STABILITY AND REACTIVITY

Reactivity:	None
Chemical Stability:	☒ Stable ☐ Unstable
Possibility of Hazardous Reactions:	None
Conditions to Avoid:	None
Incompatible Materials:	Strong oxidizers
Hazardous Decomposition Products:	CO, CO2

SECTION 11 TOXICOLOGICAL INFORMATION

Information on Toxicological Effects:

Acute Toxicity:

Inhalation:

Not available

Ingestion:

Estimate: Rat, LD50 > 2000 mg/kg (See SECTION 16)

Corrosivity/Irritation:

Skin:

Estimate: Rabbit, mild irritant (See SECTION 16)

Eye:

Estimate: Rabbit, transient slight conjunctival irritation only. (See SECTION 16)

Sensitization:

Skin:

Guinea pig: Non-sensitizing

Repeated Dose Toxicity:

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^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 mg/m^3, 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.

Carcinogenicity:

The IARC evaluated titanium dioxide as a Group 2B carcinogen, for which there is inadequate human evidence, but sufficient animal evidence. The latter is based upon the evidence such as development of lung tumors in rats receiving chronic inhalation exposure to powdered titanium dioxide at levels that induce particle overload of the lung.

However, there is an inhalation study of a toner containing titanium dioxide which suggested no association between toner exposure and tumor development in rats.

Mutagenicity:

Ames Test (S. typhimurium): Negative

Toxicity for Reproduction:

Not available

Other Information:

Not available

SECTION 12 ECOLOGICAL INFORMATION

Toxicity: Estimate: Fish, 96h LL50 > 1000 mg/l (WAF)
Estimate: Crustaceans, 48h EL50 > 1000 mg/l (WAF)
Estimate: Algae, ErL50(0-72h) > 1000 mg/l (WAF) (See SECTION 16)

Persistence and Degradability: Not available

Bioaccumulative Potential: Not available

Mobility in Soil: Not available

Results of PBT and vPvB Assessment: No results that the component(s) of this toner meet(s) the PBT or vPvB criteria under Regulation (EC) No 1907/2006.

Other Adverse Effects: Not available

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Treatment Methods:

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 TRANSPORT INFORMATION

UN Number: None

UN Proper Shipping Name: None

Transport Hazard Class: None

Packing Group: None

Environmental Hazards: Not classified as environmentally hazardous under UN Model Regulations and marine pollutant under IMDG Code.

Special Precautions for User: None

SECTION 15 REGULATORY INFORMATION

< USA Information >

SARA Title III §313:

Chemical Name	Weight %
"Chromium(III) Compounds" (as Cr)	1-5 (0.1-0.5)
"Copper Compounds" (as Cu)	1-5 (0.1-0.5)

California Proposition 65:

Chemical Name	Weight %
None	

< EU Information >

Safety, Health and Environmental Regulations/Legislation:

(EC) No 1907/2006: **Authorisation:** Not regulated

Restriction: Not regulated

(EC) No 1005/2009: Not regulated

(EC) No 850/2004: Not regulated

(EC) No 689/2008: Not regulated

Others: None

Chemical Safety Assessment under (EC) No 1907/2006: Not required

SECTION 15 REGULATORY INFORMATION (continued)

< 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

<EU R-phrase according to 67/548/EEC>
R22: Harmful if swallowed.
< EU Hazard statement according to (EC) No 1272/2008>
H302: Harmful if swallowed.
<Revised information from the previous version>
Entirely revised
<Term explanation>
Estimate: Estimate based on data of similar product or the ingredient(s) 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 1999/45/EC
- EU Regulation (EC) No 1907/2006, (EC) No 1272/2008, (EC) No 1005/2009, (EC) No 850/2004, (EC) No 689/2008
- Canada Workplace Hazardous Materials Information System
- Australia National Occupational Health and Safety Commission's Approved Criteria for Classifying Hazardous Substances[NOHSC:1008]

Abbreviations:

OSHA HCS: Occupational Safety and Health Act, Hazard Communication Standard (USA)
FHSA: Federal Hazardous Substances Act (USA)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
SVHC: Substances of Very High Concern
IARC: International Agency for Research on Cancer
NTP: National Toxicology Program (USA)
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 OEL: Occupational exposure limits at Community level under Directive 2004/37/EC, 98/24/EC, 91/322/EEC, 2000/39/EC, 2006/15/EC and 2009/161/EU
DFG MAK: MAK(Maximale Arbeitsplatz-Konzentration) under Deutsche Forschungsgemeinschaft
TWA: Time Weighted Average
STEL: Short Term Exposure Limit
PNOR: Particulates Not Otherwise Regulated
PNOS: Particles (insoluble or poorly soluble) Not Otherwise Specified
WHMIS: Workplace Hazardous Materials Information System
NOHSC: National Occupational Health and Safety Commission