Canon						MSDS #:	TN1667-0102
Canon		MA	TERIAL S	SAFETY DA	TA SHEET	Product Code:	9627A / F44-0212
SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING							
Product Name:	Canon GP	R-27 Cya	an Drum Uni	t			
Product Code:	9627A / F4	4-0212					
Manufacturer:	Canon Inc., 30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo, Japan, Ph#03-3758-2111.						
Supplier:	Canon US	A Inc., O	ne Canon Pl	aza, Lake Succe	ess, NY, 11042,	USA	
Phone #:	1-800-OK-	CANON	1	24Hr. Emergen	cy CHEMTREC	C# 1-800-424-93	300
SECTION 2 EU Classification:			FICATION dangerous.				
Emergency Overvie	e w: Cyan fin	e powde	er, slight plas	tic 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							
SECTION 3	COMPOSIT	ION/IN	FORMATI	ON ON INGRI	EDIENTS		
< 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	85-95	None/ None	Not established	Not established	Not established	Not established
Pigment	Confidential	1-4	None/ None	Not established	Not established	Not established	Not established

< Carcinogen >

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.

< PBT substance and vPvB substance >

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

Page 1 of 7



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.



SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

	15 mg/m^3 (Total dust), 5 mg/m^3 (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:	Required
	Not Required
Eye/Face Protection:	Required
	Not Required
Skin Protection:	Required
	Not Required

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Cyan 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(°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:	1.0-1.2
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
Evaporation Rate:	Not applicable

			Page 4 of 7
Canon		MSDS #:	TN1667-0102
	MATERIAL SAFETY DATA SHEET	Product Code:	9627A / F44-0212
SECTION 10 STABILIT	Y AND REACTIVITY		
Stability:	⊠ Stable □ Unstable		
Conditions to Avoid:	None		
Materials to Avoid:	Strong oxidizers		
Hazardous Decomposition Pr	oducts: CO, CO2		
Hazardous Polymerization:	☐ May Occur ⊠ Will Not Occur		
Conditions to Avoid:	None		
SECTION 11 TOXICOL	OGICAL INFORMATION		
Acute Toxicity: Inhalation: Not available			
Ingestion: <u>Estimate: Rat, LD50 > 2</u>	2000 mg/kg (See SECTION 16)		
Eye: <u>Estimate: Rabbit, transie</u>	ent slight conjunctival irritation only. (See SECTION 16	ō)	
Skin: Estimate: Rabbit, non-ir	ritant (See SECTION 16)		
Sensitization: Estimate: skin: Non-sen	sitizing (See SECTION 16)		
Mutagenicity: Ames Test (S. typhimur	ium, E. coli): Negative		
Reproductive Toxicity: Not available			
Carcinogenicity: Not available			
Others:			
	Imonary response upon chronic inhalation exposure in r s compared to commercial toner. No pulmonary change		0

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/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.



MATERIAL SAFETY DATA SHEET

SECTION 12 ECOLOGICAL INFORMATION		
Mobility:	Not available	
Persistence / Degradability:	Not available	
Bioaccumulation:	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 DISPOSAL CONSIDERATIONS

Method of Disposal:

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	FRANSPORT INFORMATION
UN #:	None
UN Shipping Name	None
UN Classification:	None
UN Packing Group	:None
Marine Pollutant:	☐ Yes Chemical name (wt%): ☑ No
Special Precautions	None
SECTION 15	REGULATORY INFORMATION
< EU Information >	>
Information on th	e Label:
Symbol & India	cation: Not required
R-Phrase: Not required	
S-Phrase: Not required	
Dangerous Con Not required	nponent(s):
Special Precaut Not required	ions under 1999/45/EC Annex V:
_	s in Relation to Protection of Man or the Environment:
76/769/EEC:	Not regulated
(EC)2037/2000:	Not regulated
(EC)304/2003:	Not regulated
Others:	None

< USA Information >	
Information on the Label under OS	SHA:
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 >	Not clossified as hogondous according to criteria of NOUSC
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 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]

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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