

	DENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING					
Product Identifier						
Product Name:	Canon GPR-31 Yellow Toner					
Product Code:	2802B / F42-8138					
Relevant Identifie	d Uses: Toner for electrophotographic apparatus					
Details of Supplier Supplier:	r of Safety Data Sheet:					
Address:						
Telephone Numb	er:					
Emergency Teleph	none Number:					
Manufacturer:	Canon Inc.					
Address:	30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo 146-8501, Japan					
SECTION 2	HAZARDS IDENTIFICATION					
Emergency Overv	iew: Yellow fine powder, slight plastic odor.					
US Regulatory Sta Not classified a	a tus under OSHA HCS: as hazardous.					
US Label Element	s under OSHA HCS:					
Signal Word:	Not required					
Hazard Warnin	g: Not required					
Safety Advice:	Not required					
Hazardous Com	ponent: Not required					
EU Classification	under 1999/45/EC: us dangerous.					
EU Label Element	s under 1999/45/EC:					
Symbol & Indic	ation: Not required					
R-Phrase:	Not required					
S-Phrase:	Not required					
Dangerous Com	ponent: Not required					
Applicable Lab	el Elements in accordance with Annex V to 1999/45/EC:					
Other Hazards: No.	one					



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SECTION 3

COMPOSITION/INFORMATION ON INGREDIENTS

Substance or Mixture: <u>Mixture</u> Ingredient(s):

Chemical Name/ Generic Name	CAS #/ Concentration EC # Concentration				EU Classification according to (EC) No 1272/2008 Hazard Class/ Hazard		Note to Other
Generic Want		Range (%)	Symbol/ Indication of Danger	R-Phrase ^{*1}	Hazard Class/ Category Code	Hazard Statement ^{*1}	Hozorde*2
Polyester resin	Confidential	80-90	None	None	None	None	
Pigment	Confidential	5-10	None	None	None	None	
Amorphous silica	7631-86-9/ 231-545-4	1-3	None	None	None	None	(1)
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

 13463-67-7
 IARC: Gr

Titanium dioxide (< 1%)

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 be non-irritant.

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:

CO2, water, dry chemicals

Unsuitable Extinguishing Media:

None

Special Hazards:

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

Hazardous Combustion Products:

<u>CO2, CO</u>

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.



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

USA	ACGIH TLV	EU OEL	DFG MAK
OSHA PEL			
PNOR:	PNOS:	Not established	Dust:
TWA 15 mg/m^3	TWA 10 mg/m^3		4 mg/m^3
(Total dust),	(Inhalable fraction),		(Inhalable fraction),
TWA 5 mg/m^3	TWA 3 mg/m ³		1.5 mg/m^3
(Respirable fraction)	(Respirable fraction)		(Respirable fraction
20 mppcf, 80 (mg/m ³)/%SiO ₂	Not established	Not established	Not established
TWA 15 mg/m ³ (Total dust)	TWA 10 mg/m ³	Not established	Not established
	OSHA PEL PNOR: TWA 15 mg/m ³ (Total dust), TWA 5 mg/m ³ (Respirable fraction) 20 mppcf, 80 (mg/m ³)/% SiO ₂ TWA 15 mg/m ³	OSHA PELPNOR: TWA 15 mg/m³ (Total dust), TWA 5 mg/m³ (Respirable fraction)PNOS: TWA 10 mg/m³ (Inhalable fraction), TWA 3 mg/m³ (Respirable fraction)20 mppcf, 80 (mg/m³)/%SiO2Not establishedTWA 15 mg/m³TWA 10 mg/m³	OSHA PEL PNOR: PNOS: Not established TWA 15 mg/m³ TWA 10 mg/m³ Inhalable fraction), Not established TWA 5 mg/m³ TWA 3 mg/m³ (Inhalable fraction), TWA 3 mg/m³ (Respirable fraction) TWA 3 mg/m³ Not established 20 mppcf, Not established Not established 80 (mg/m³)/%SiO2 TWA 10 mg/m³ 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



SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Che Appearance:	mical Properties: Yellow fine powder		
Odor:	Slight plastic odor		
рН:	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/Wate	r): 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 R	EACTIVITY		

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: Est

Estimate: Rabbit, non-irritant (See SECTION 16)

Eye:

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

Sensitization:

Skin:

Estimate: Non-sensitizing (See SECTION 16)

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/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.

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, E. coli): Negative

Toxicity for Reproduction:

Not available

Other Information:

Not available



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SECTION 12 ECOLOGICAL INFORMATION Toxicity: Estimate: Fish, 96h LC50 > 100 mg/l Estimate: Crustaceans, 48h EC50 > 100 mg/l Estimate: Algae, ErC50(0-72h) > 100 mg/l (See SECTION 16) Persistence and Degradability: Not available Not available **Bioaccumulative Potential:** Mobility in Soil: Not available **Results of PBT and vPvB** No results that the component(s) of this toner meet(s) the PBT or vPvB criteria **Assessment:** 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 TRANSP	ORT INFOR	RMATION		
UN Number: None				
UN Proper Shipping Name: None				
Transport Hazard Class: None				
Packing Group: None				
Environmental Hazards:	ivironmental Hazards: Not classified as environmentally hazardous under UN Model Regulations and marine pollutant under IMDG Code.			
Special Precautions for Use	er: None			
SECTION 15 REGULA < USA Information > SARA Title III §313: Chemical Name		ORMATION		Weight %
None				_
California Proposition 65: Chemical Name				Weight %
None				
< EU Information > Safety, Health and Environ	nmental Regu	ilations/Legislation:		
(EC) No 1907/2006: Au	thorisation:	Not regulated		
Re	estriction:	Not regulated		
(EC) No 1005/2009: <u>Not</u>	regulated			
(EC) No 850/2004: Not	regulated			
(EC) No 689/2008: Not	regulated			
Others: <u>Non</u>	ie			

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



SECTION 15 REGULATORY INFORMATION (continued)

< 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

<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

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