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#### MATERIAL SAFETY DATA SHEET

MSDS #: TN1401-0101 Product Code: 0459B / F43-9631

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE

COMPANY/UNDERTAKING

**Product Name:** Canon GPR-23 Yellow Drum Unit

**Product Code:** 0459B / F43-9631

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 24Hr. 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
Polyester resin	Confidential	85-95	None/ None	Not established	Not established	Not established	Not established
Pigment	Confidential	1-7	None/ None	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:**

Yellow 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

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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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SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION					
<b>Exposure Guidelines:</b>					
ACGIH TLV (TWA): 10 mg/m <sup>3</sup>	<sup>3</sup> (Total dust), 5 mg/m <sup>3</sup> (Respirable fraction) (Inhalable fraction), 3 mg/m <sup>3</sup> (Respirable fraction) (Inhalable fraction), 1.5 mg/m <sup>3</sup> (Respirable fraction)				
Engineering Controls: Use adequate ventilation.					
<b>Personal Protection Equipment(s):</b>					
<b>Respiratory Protection:</b> ☐ Requi					
	☐ Required  ▼ Not Required				
	☐ Required  Not Required				
SECTION 9 PHYSICAL AND	CHEMICAL PROPERTIES				
Appearance:	Yellow fine powder				
Odor:	Slight plastic odor				
pH:	Not applicable				
<b>Boiling Point/Range(°C):</b>	Not applicable				
<b>Melting Point/Range(°C):</b>	85-120 (Softening point)				
Decomposition Temperature ( ${}^{\circ}C$ ):	> 200				
Flash Point(°C):	Not applicable				
Flammable (Explosive) Limits:	Not applicable				
<b>Autoignition Temperature(°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:	1.0-1.2				
Water Solubility:	Negligible				
Fat Solubility:	Partially soluble in toluene and xylene.				
Partition Coefficient (n-Octanol/Water	r): Not applicable				
Percent Volatile:	Negligible				
<b>Evaporation Rate:</b>	Not applicable				
Viscosity (mPa s):	Not applicable				

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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:					
<u>-</u>	t conjunctival irritation only. (See Section 16)				
Skin: Estimate: Rabbit, non-irritant (So	ee Section 16)				
Sensitization: Estimate: Guinea pig, skin: Non-	-sensitizing (See Section 16)				
Mutagenicity: Ames Test (S. typhimurium, E. c	coli): Negative				
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.

Canon

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**SECTION 12** ECOLOGICAL INFORMATION Mobility: Not available Persistence / Degradability: 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** 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** TRANSPORT INFORMATION UN #: None **UN Shipping Name:** None **UN Classification:** None **UN Packing Group:** None Chemical name (wt%): **⋈** No **Special Precautions:** None **SECTION 15** REGULATORY INFORMATION < EU Information > Information on the Label: Symbol & Indication: Not required **R-Phrase:** Not required S-Phrase: Not required **Dangerous Component(s):** Not required Special Precautions under 1999/45/EC Annex V: Not required Specific Provisions 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

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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 %

**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 of 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]

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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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