# MATERIAL SAFETY DATA SHEET

## SECTION 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product Name:** Canon Cartridge 111 Magenta  
**Product Code:** 1658B / R84-9022  
**Manufacturer:** Canon Inc., 30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo, Japan, Ph#03-3758-2111  
**Supplier:** Canon USA, One Canon Park, Melville, NY 11747, USA  
**Phone #:** 1-800-OK-CANON  
**24Hr. Emergency CHEMTREC#:** 1-800-424-9300

## SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name / Generic Name</th>
<th>CAS # / EC #</th>
<th>Weight %</th>
<th>EU Symbol/ R-Phrase</th>
<th>USA OSHA PEL</th>
<th>ACGIH TLV</th>
<th>EU ILV</th>
<th>DFG MAK</th>
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<tbody>
<tr>
<td>Styrene acrylate copolymer</td>
<td>Confidential</td>
<td>75-85</td>
<td>None/ None</td>
<td>Not established</td>
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<tr>
<td>Wax</td>
<td>Confidential</td>
<td>5-15</td>
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<tr>
<td>Pigment</td>
<td>Confidential</td>
<td>1-6</td>
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<tr>
<td>Amorphous silica</td>
<td>7631-86-9/ 231-545-4</td>
<td>1-2</td>
<td>None/ None</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
<td>4 mg/m³ (Inhalable fraction)</td>
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**Chemical Name / Generic Name**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
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</tbody>
</table>

**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 based on animal testing. 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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**Date of Issue:** July 4, 2006  
**Revised:**
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:

- USA OSHA PEL (TWA): 15 mg/m³ (Total dust), 5 mg/m³ (Respirable fraction)
- ACGIH TLV (TWA): 10 mg/m³ (Inhalable fraction), 3 mg/m³ (Respirable fraction)
- DFG (MAK): 4 mg/m³ (Inhalable fraction), 1.5 mg/m³ (Respirable fraction)

(Also refer to SECTION 2)

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: Magenta fine powder
Odor: Slight plastic odor
pH: Not applicable

Boiling Point/Range(°C): Not applicable
Melting Point/Range(°C): 100-150 (Softening point)
Decomposition Temperature(°C): > 200
Flash Point(°C): Not applicable
Flammable (Explosive) Limits: Not applicable
Autoignition Temperature(°C): Not available

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

Date of Issue: July 4, 2006
Revised:
SECTION 10  STABILITY AND REACTIVITY

Stability: ☑ Stable
☑ Unstable

Conditions to Avoid: None

Materials to Avoid: Strong oxidizers

Hazardous Decomposition Products: CO, CO2

Hazardous Polymerization: ☑ May Occur
☑ Will Not Occur

SECTION 11  TOXICOLOGICAL INFORMATION

Acute Toxicity:

Inhalation:
Not available

Ingestion:
Rat, LD50 > 2000 mg/kg

Eye:
Rabbit, transient slight conjunctival irritation only.

Skin:
Rabbit, non-irritant

Sensitization:
Not available

Mutagenicity:
Ames Test (S. typhimurium, E. 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 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.
SECTION 12  ECOLOGICAL INFORMATION

Mobility: Not available
Persistence / Degradability: Not available
Bioaccumulation: Not available
Ecotoxicity: Fish (Rainbow trout), 96h LL50 > 1000 mg/l (WAF)
Crustaceans (Daphnia magna), 48h EL50 > 1000 mg/l (WAF)
Algae (Scenedesmus subspicatus), EbL50(72h), ErL50(0-72h) > 1000 mg/l (WAF)
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
Marine Pollutant: Yes  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
< 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:

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>None</td>
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California Proposition 65:

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>None</td>
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</table>

< 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

None

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
- DFG, List of MAK and BAT Values
- Canada Workplace Hazardous Materials Information System
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