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

<table>
<thead>
<tr>
<th>Product Name:</th>
<th>Canon Cartridge 320 Starter (for Multi Function Printer)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Code:</td>
<td>R00-6013</td>
</tr>
<tr>
<td>Manufacturer:</td>
<td>Canon Inc., 30-2, Shimomaruko 3-Chome, Ohta-ku, Tokyo, Japan Ph # 03-3758-2111</td>
</tr>
<tr>
<td>Supplier:</td>
<td>Canon U.S.A., Inc. One Canon Park, Melville, NY 11747, USA</td>
</tr>
<tr>
<td>Phone #:</td>
<td>1-800-OK-CANON 24 Hr. Emergency CHEMTREC # 1-800-424-9300</td>
</tr>
</tbody>
</table>

### SECTION 2  HAZARDS IDENTIFICATION

**EU Classification:** Not classified as dangerous.

**Emergency Overview:** Black 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

### SECTION 3  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>
</tr>
</thead>
<tbody>
<tr>
<td>Styrene acrylate copolymer</td>
<td>Confidential</td>
<td>45-55</td>
<td>None/ None</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td>Ferrite including zinc</td>
<td>Confidential</td>
<td>40-50 (as Zn: 0-0.7)</td>
<td>None/ None</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
<td>Not established</td>
</tr>
<tr>
<td>Amorphous silica</td>
<td>7631-86-9/ 231-545-4</td>
<td>1-2</td>
<td>None/ None</td>
<td>20 mppcf, 80 (mg/m³)/%SiO₂</td>
<td>Not established</td>
<td>Not established</td>
<td>4 mg/m³ (Inhalable fraction)</td>
</tr>
</tbody>
</table>

*< 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 substance under Regulation (EC)1907/2006.
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/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 process enclosures, local exhaust ventilation or other engineering controls to keep airborne concentrations below the exposure limits.

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:  
Black 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

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:  
1.4-1.8

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
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

Conditions to Avoid: None

SECTION 11 TOXICOLOGICAL INFORMATION

Acute Toxicity:

Inhalation:
Not available

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

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

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

Sensitization:
Estimate: skin: Non-sensitizing (See SECTION 16)

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:
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  TRANSPORT INFORMATION

UN #: By ship:None  By air:Not identified
UN Shipping Name: By ship:None  By air:Not identified
UN Classification: By ship:None  By air:Not identified
UN Packing Group: By ship:None  By air:Not identified
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)689/2008: Not regulated
Others: None

Date of Issue: December 5, 2008  Revised:
< 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>
<th>Chemical Name</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Zinc compounds&quot;</td>
<td>40-50</td>
</tr>
<tr>
<td>(as Zn)</td>
<td>(0-0.3)</td>
</tr>
</tbody>
</table>

California Proposition 65:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
</tr>
</tbody>
</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

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

Date of Issue: December 5, 2008
Revised:
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.
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).
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

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