# CanonMATERIAL SAFETY DATA SHEETPage 1 of 9<br/>R94-8002<br/>TC0268-0101

| SECTION 1        | IDENTIFICATION OF<br>COMPANY/UNDERT |                      | CE/PREPAR     | ATION AND      | OF THE         |
|------------------|-------------------------------------|----------------------|---------------|----------------|----------------|
| Product Name:    | Canon EP-62 Cartridg                | ge for Copier/Printe | er            |                |                |
| Product Code:    | R94-8002                            |                      |               |                |                |
| Manufacturer:    | Canon Inc., 30-2,Shin               | nomaruko 3-Chom      | e,Ohta-ku,To  | kyo, Japan, Ph | # 03-3758-2111 |
| Supplier:        | Canon USA, Inc., On                 | e Canon Plaza, La    | ke Success, N | VY, 11042, US  | А              |
| Phone #:         | 1-800-OK-CANON                      | 24 Hr. Eme           | rgency CHEN   | MTREC # 1-80   | 00-424-9300    |
| MSDS #:          | TC0268-0101                         |                      |               |                |                |
| SECTION 2        | COMPOSITION/INFO                    | RMATION ON II        | NGREDIENT     | TS             |                |
| Hazardous Ingred | ient(s)                             |                      |               |                |                |
| Chemical Name    |                                     | CAS #                | Weight %      | EU Symbol      | EU R-Phrase    |
| None             |                                     |                      |               |                |                |
| Chemical Name    |                                     | USA OSHA PEL         |               | ACGIH TL       | V              |
| None             |                                     |                      |               |                |                |
|                  |                                     |                      |               |                |                |

| Chemical Name | EU ILV | DFG MAK |
|---------------|--------|---------|
| None          |        |         |

#### SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS - Continued

| Carcinogen<br>Chemical Name | CAS # | Reference |  |
|-----------------------------|-------|-----------|--|
| None                        |       |           |  |
|                             |       |           |  |
| Other Ingredient(s)         |       |           |  |
| Chemical/Generic Name       |       | Weight %  |  |
| Styrene acrylate copolymer  |       | 40 - 50   |  |
| Iron oxide(1317-61-9)       |       | 40 - 50   |  |

## SECTION 3 HAZARDS IDENTIFICATION

Emergency Black fine powder, slight plastic odor. Overview:

| Potential Health Ef | fects and Symptoms:   |
|---------------------|---|
| Inhalation:         | Minimal respiratory tract irritation may occur as with exposure to large amounts of any non-toxic dust. |
| Ingestion:          | Ingestion is not applicable route of entry for intended use.  |
| Eye:                | May cause eye irritation.   |
| Skin:               | Unlikely to cause skin irritation.  |
| Chronic Effects:    | Not known.  |
| Medical Condition   | ons Generally known to be Aggravated by Exposure:<br>Not identified                                     |



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#### **SECTION 4** FIRST AID MEASURES

| First Aid Measures<br>Inhalation: | Remove victim to fresh air.<br>Get medical attention if symptoms persist.                            |
|-----------------------------------|--|
| Ingestion:                        | Dilute stomach contents with several glasses of water.<br>Get medical attention if symptoms persist. |
| Eye:                              | Flush with running water for at least 15 minutes.<br>If irritation persist, get medical attention.   |
| Skin:                             | Wash with soap and water.<br>If irritaion persist, get medical attention.                            |
| Note to<br>Physicians:            | None   |

#### **SECTION 5** FIRE FIGHTING MEASURES

| Fire Fighting Measures:              |  |
|--------------------------------------|--|
| Extinguishing Media:                 | CO2, water, dry chemicals  |
| Unsuitable<br>Extinguishing Media:   | None   |
| Special Fire<br>Fighting Procedures: | None   |
| Unusual Fire and Explosion Hazards:  | Toner material, like most organic material in powder form, is capable of creating a dust explosion.          |
| Fire and Explosive Proper            | ties:  |
| Flash Point(°C):                     | No data available  |
| Flammable(Explosive)<br>Limits:      | No data available  |
| Autoignition<br>Temperature(°C):     | No data available  |
| Flammability:                        | Non-flammable solid (according to test methods of USA 16 CFR 1500.44 and Annex V of EU Directive 84/449/EEC) |

## SECTION 5 FIRE FIGHTING MEASURES - Continued

| Fire and Explosive Properties - Continued: |  |  |  |
|--|--|--|--|
| Autoflammability:                          | Not applicable   |  |  |
| Explosive Properties                       | See "Unusual Fire and Explosion Hazards"   |  |  |
| Oxidizing Properties                       | No data available  |  |  |
| Hazardous<br>Combustion Product            | CO2, CO  |  |  |
| Other Properties:                          | Not known.   |  |  |
| other reperides.                           | NOT KHOWH.   |  |  |
|  |  |  |  |
| SECTION 6 ACC                              | IDENTAL RELEASE MEASURES   |  |  |
| Personal Precautions:                      | Avoid breathing dust.  |  |  |
|  | Use with adequate ventilation.   |  |  |
|  |  |  |  |
| Environmental<br>Precautions:              | Do not wash away into sewer.   |  |  |
|  |  |  |  |
| Method for Cleaning                        | Sweep material onto paper and carefully transfer to a sealable waste container.  |  |  |
| Up:  | If a vacuum is used, the motor must be rated as dust tight.                      |  |  |
|  | A conductive hose bonded to the machine should be used to reduce static buildup. |  |  |
|  |  |  |  |
| SECTION 7 HAN                              | IDLING AND STORAGE   |  |  |
| Handling:                                  | Avoid breathing dust.  |  |  |
| ······································     | Use with adequate ventilation.   |  |  |
|  | Wash thoroughly after handling.  |  |  |
| Storage:                                   | Keep out of reach of children.   |  |  |
|  |  |  |  |

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|-----------|---|--|
|           |   |  |
| SECTION 8 | EXPOSURE CONTROLS / PERSONAL PROTECTION |  |

| Exposure Guidelines:                                 | USA OSHA(TWA/PEL):15mg/m3 (Total dust)<br>5mg/m3 (Respirable fraction)<br>ACGIH(TWA/TLV): 10mg/m3 (Inhalable particulate)<br>3mg/m3 (Respirable particulate)<br>DFG (MAK): 4 mg/m3 (Inhalable fraction)<br>1.5 mg/m3 (Respirable fraction) (Also refer to SECTION 2) |
|--|--|
| Engineering Controls:                                | Good general ventilation should be sufficient under intended use.  |
| Personal Protection Eq<br>Respiratory<br>Protection: | uipment(s):  |
| Eye/Face<br>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):           |  |
| Flash Point(°C):                         | No data available  |
| Flammable (Explosive) Limits:            | No data available  |
| Autoignition Temperature(°C):            | No data available  |
| Flammability:                            | Non-flammable solid (according to test methods of USA 16 CFR |
|  | 1500.44 and Annex V of EU Directive 84/449/EEC)              |
| Autoflammability:                        | Not applicable   |
| Explosive Properties:                    | See "Unusual Fire and Explosion Hazards"                     |
| Oxidizing Properties:                    | No data 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:                        | Not applicable   |
| Evaporation Rate:                        | Not applicable   |

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#### SECTION 10 STABILITY AND REACTIVITY

| Stability:<br>Conditions to Avoid           | I: None □ Unstable   |
|---|--|
| Materials to Avoid:                         | Strong oxidizers   |
| Hazardous Decompos<br>Products:             | ition Combustion will produce carbon dioxide and, possibly toxic chemicals such as carbon monoxide.  |
| Hazardous Polymeriza<br>Conditions to Avoid |  |
| SECTION 11 TOX                              | ICOLOGICAL INFORMATION   |
| Acute Toxicity:<br>Inhalation:              | (Data from similar toner) : LC50: >5mg/L/4hr (rats)  |
| Ingestion:                                  | (Data from ingredients of toner) : Oral LD50: >2000mg/Kg (rats)  |
| ·   | (Data from ingredients of toner): Not classified as irritant, according to OSHA<br>Hazard Communication Standard (HCS) and EU Directive 67/548/EEC based on<br>test data of rabbits. |
|   | (Data from ingredients of toner): Not classified as irritant, according to OSHA<br>Hazard Communication Standard (HCS) and EU Directive 67/548/EEC based on<br>test data of rabbits. |
|   | No sensitizer according to EU Directive 67/548/EEC Annex I and strong sensitizer list of FHSA.   |
| Mutagenicity:                               | Negative (Ames Test: Salmonella typhimurium)   |
| -   | No reproductive toxic substances according to EU Directive 67/548/EEC Annex I, California Proposition 65 and DFG.  |

#### SECTION 11 TOXICOLOGICAL INFORMATION - Continued

| Carcinogenicity: | No human carcinogen or potential carcinogen, according to IARC Monographs,<br>NTP, OSHA(USA) regulation, California Proposition 65 and Annex I of EU<br>Directive 67/548/EEC. |
|------------------|---|
| Others:          | Sub-acute Toxicity - Rat; 90days inhalation Test<br>Test sample: magnetic toner<br>(mean volume diameter is 6.0 µm)<br>NOEL (No observed effect level): 16 mg/m3              |

#### SECTION 12 ECOLOGICAL INFORMATION

No information indicating any adverse ecological effects.

#### SECTION 13 DISPOSAL CONSIDERATION

Method of Disposal: This product is constructed from plastics and metals. The waste toner could be considered as plastic powder waste. Disposal should be subject to federal,state or local laws.

#### SECTION 14 TRANSPORT INFORMATION

| UN #:                | 2807   |
|----------------------|--|
| UN Shipping Name:    | Magnetized material  |
| UN Classification:   | 9  |
| UN Packing Group:    | None   |
| Special Precautions: | 33 or more of these products shipped together, by air, are regulated as magnetized material. |

#### SECTION 15 REGULATORY INFORMATION

| EU Information:<br>Information on the    | Label:  |  |
|--|---|--|
| Symbol &                                 | Not required.   |  |
| Indication:<br>R-Phrase:                 | Not required.   |  |
| S-Phrase:                                | Not required  |  |
| Dangerous<br>Component(s):               | None  |  |
| Specific Provision<br>76/769/EEC:        | ns in Relation to Protection of Man or the Environment:<br>Not regulated. |  |
| (EC)3093/94:                             | Not regulated.  |  |
| (EEC)2455/92:                            | Not regulated.  |  |
| Others:                                  | None  |  |
| USA Information:<br>Information on the L | Label:  |  |
| Signal Word:                             | Not required  |  |
| Hazard warning:                          | Not required  |  |
| Safety Advice:                           | Not required  |  |
| Hazardous<br>Component(s):               | None  |  |
| SARA Title III §313<br>Chemical Nar      |   |  |
| None                                     |   |  |
| California Propositio                    |   |  |
| <u>Chemical Nar</u><br>None              | me Weight %   |  |

#### SECTION 16 OTHER INFORMATION

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

- 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, 88/379/EEC and their amendments.

- EU Regulation (EC)3093/94, (EEC)2455/92 and their amendments.

Abbreviations:

"EU" stands for European Union.

"OSHA PEL" stands for PEL(Permissible Exposure Limit) under Occupational Safety and Health Administration. "ACGIH TLV" stands for TLV(Threshold Limit Value) under American Conference of Governmental Industrial Hygienists.

"EU ILV" stands for Indicative Limit Values for Occupational Exposure under EU Directive 91/322/EEC.

"DFG MAK" stands for MAK(Maximale Arbeitsplatzkonzentrationen) under Deutsche Forschungsgemeinschaft. "TWA" stands for Time Weighted Average.

"IARC" stands for International Agency for Research on Cancer.

"NTP" stands for National Toxicology Program (USA).

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