

# MATERIAL SAFETY DATA SHEET

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

| Product Name:        | Canon Toner (Black) for CLC1100 series   |  |  |
|----------------------|--|--|--|
| <b>Product Code:</b> | 1423A / F42-3101   |  |  |
| 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         24 Hr. Emergency CHEMTREC # 1-800-424-9300              |  |  |

# SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

| < Ingredient(s) ><br>Chemical Name /<br>Generic Name                       | CAS #/<br>EC #           | Weight<br>%                | EU Symbol/<br>R-Phrase | USA<br>OSHA PEL | ACGIH TLV       | EU ILV          | DFG MAK         |
|--|--------------------------|----------------------------|------------------------|-----------------|-----------------|-----------------|-----------------|
| Polyester resin  | Confidential             | 85-95                      | None / None            | Not established | Not established | Not established | Not established |
| Hydrogen<br>bis[3,5-di-tert-butylsalicyl<br>ato(2-)-O1,O2]chromate(1<br>-) | 72869-85-3/2<br>76-955-4 | 1-6<br>(as<br>Cr: 0.1-0.6) | Xn / R22               | Not established | Not established | Not established | Not established |
| Pigment  | Confidential             | 1-5                        | None / None            | Not established | Not established | Not established | Not established |
| Carbon Black   | 1333-86-4<br>/215-609-9  | < 1                        | None/ None             | 3.5 mg/m3 (TWA) | 3.5 mg/m3(TWA)  | Not established | Not established |

#### < Carcinogen > Chemical Name

Carbon Black (<1%)

1333-86-4 IARC : Group 2B.

Reference

CAS#

NTP; OSHA; Annex I to 67/548/EEC : Not listed.

# SECTION 3 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 cause 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.

### Medical Conditions Generally known to be Aggravated by Exposure: Not determined



# 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 toner 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 infromation, 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):**

| <b>Respiratory Protection:</b> | <ul><li>Required</li><li>Not Required</li></ul>    |
|--------------------------------|--|
| Eye/Face Protection:           | <ul><li>Required</li><li>Not Required</li></ul>    |
| Skin Protection:               | <ul> <li>Required</li> <li>Not Required</li> </ul> |

# 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):                 | 85-120(Softening point)   |
| <b>Decomposition Temperature(°C):</b>    | > 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:              | 1.0-1.5   |
| 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:                        | X Stable<br>□ Unstable          |
|-----------------------------------|---------------------------------|
| Conditions to Avoid:              | None                            |
| Materials to Avoid:               | Strong oxidizers                |
| Hazardous Decomposition Products: | <u>CO, CO2</u>                  |
| Hazardous Polymerization:         | ☐ May Occur<br>X Will Not Occur |
| Conditions to Avoid:              | None                            |

# SECTION 11 TOXICOLOGICAL INFORMATION

## Acute Toxicity:

Inhalation:

Not available

### **Ingestion:**

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

### Eye:

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

# Skin:

Estimate: Rabbit, mild irritant (See Section 16)

### Sensitization:

Estimate: Guinea pig, skin : Non-sensitizing (See Section 16)

#### **Mutagenicity:**

Ames Test (S. typhimurium, E. coli): Negative

### **Reproductive Toxicity:**

Not available

### **Carcinogenicity:**

The IARC evaluated carbon black as a Group 2B carcinogen, for which there is inadequate human evidence, but sufficient animal evidence. The latter is based upon the development of lung tumors in rats receiving chronic inhalation exposure to powdered carbon black at levels that induce particle overload of the lung. However, there is a two-year inhalation study of a toner containing carbon black which demonstrated no association between toner exposure and tumor development in rats.

### **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/m<sup>3</sup> 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<sup>3</sup>, and a mild to moderate degree of fibrosis was observed in 92% of the animals at 16 mg/m<sup>3</sup>. 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 |
| <b>Bioaccumulation:</b>      | Not available |
| Ecotoxicity:                 | Not available |
| 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 T                     | TRANSPORT INFORMATION  |  |  |  |
|----------------------------------|--|--|--|--|
| UN #:                            | None   |  |  |  |
| UN Shipping Name:                | UN Shipping Name: None   |  |  |  |
| UN Classification:               | None   |  |  |  |
| UN Packing Group:                | None   |  |  |  |
|                                  | ☐ Yes Chemical name (wt%):<br>☑ No   |  |  |  |
| <b>Special Precautions:</b>      | None   |  |  |  |
| SECTION 15 F                     | REGULATORY INFORMATION   |  |  |  |
| < EU Information >               |  |  |  |  |
| Information on the               | Label:   |  |  |  |
| Symbol & Indica                  | ation: Not required  |  |  |  |
| <b>R-Phrase:</b><br>Not required |  |  |  |  |
| S-Phrase:<br>Not required        |  |  |  |  |
| Dangerous Com<br>Not required    | ponent(s):   |  |  |  |
| -                                | ons under 1999/45/EC Annex V:<br>eet available for professional user on request. |  |  |  |
| 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  |  |  |  |
| <b>Others:</b>                   | None   |  |  |  |
| < USA Information >              |  |  |  |  |
| Information on the Label:        |  |  |  |  |
| Signal Word:                     | Not required   |  |  |  |
| Hazard warning<br>Not required   | ;:   |  |  |  |
|                                  |  |  |  |  |



| Safety Advice:<br>Not required   |  |  |
|--|--|--|
| Hazardous Component(s):<br>Not required  |  |  |
| SARA Title III §313:   |  |  |
| Chemical Name  |  | Weight %   |
| "Chromium( ) compounds"<br>(as Cr)   |  | 1-6<br>(0.1-0.6)   |
| California Proposition 65:   |  |  |
| Chemical Name  |  | Weight %   |
| None   |  |  |
| < Canada Information ><br>WHMIS Controlled Product:  | Not a controlled product   |  |
| < Australia Information >  |  |  |
| Statement of Hazardous Nature:   | Not classified as hazardous according to criteri   | a of NOHSC.  |
| SECTION 16 OTHER INFOR   | MATION   |  |
| R phrase list: R22 - Harmful if swa<br>Estimate: Estimate based on test da<br>Revised information from the prev  | ata on similar toner/developer/drum and/or the ray   | w materials of this product  |
| <ul> <li>U.S. Department of Health and Human Ser</li> <li>World Health Organization International A<br/>Chemicals to Humans</li> <li>DFG, List of MAK and BAT Values</li> <li>EU Directive 76/769/EEC, 67/548/EEC, 1</li> <li>EU Regulation (EC)2037/2000, (EC)304/2</li> <li>Canada Workplace Hazardous Materials In</li> </ul> | CFR Part 372<br>n, 16CFR Part 1500<br>ical Substances and Physical Agents and Biological Exposure<br>vices National Toxicology Program, Annual Report on Carcin<br>gency for Research on Cancer, IARC Monographs on the Eva<br>999/45/EC<br>2003 | nogens<br>aluation on the Carcinogenic Risk of   |
| ACGIH TLV: TLV(Threshold Limit Value)<br>EU ILV: Indicative Limit Values for Occup<br>DFG MAK: MAK(Maximale Arbeitsplatz-I<br>TWA: Time Weighted Average.<br>STEL: Short Term Exposure Limit.<br>IARC: International Agency for Research on<br>NTP: National Toxicology Program (USA).   | th Act, Hazard Communication Standard (USA).<br>USA).<br>nformation System.  | gienists.  |
| date hereof. The company/manufacturer r<br>responsibility for any reliance thereon. The<br>determination as to its suitability for their p<br>with applicable Federal, state and local law<br>nature whatsoever resulting from the use or<br>NO REPRESENTATIONS OR WARRA   | NTIES, EITHER EXPRESS OR IMPLIED, OF MERC<br>THER NATURE ARE MADE WITH RESPECT TO THE  | racy of the Information and disclaims<br>ins receiving same will make their own<br>termined by the user to be in accordance<br>urer be responsible for damages of any<br>CHANTABILITY, FITNESS FOR A |