

Version #: 01

Issue date: 21-May-2023

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Trade name or designation of the mixture** Print Cartridge Black IM C7010(Black toner)

**Registration number** -

**Synonyms** None.

**SDS No.** 842638

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** Image formation in printing machines or copiers dry toner

**Uses advised against** No other uses are advised.

### 1.3. Details of the supplier of the safety data sheet

**Distributor** RICOH Schweiz AG

**Address** Hertistrasse 2 CH - 8304 Wallisellen, Switzerland

**Phone** 41 844 360 360

**E-mail** tqm@ricoh.ch

**Importer** Ricoh Europe SCM B.V.

**Address** Blankenweg 24, 4612 RC Bergen op Zoom, The Netherlands

**E-mail** reu.compliance@ricoh-europe.com

**Manufacturer** Ricoh Co., Ltd.

**Address** Chome 3-6 Nakamagome, Ôta, Tokyo, 143-8555, Japan

**E-mail** msdsinfo@nts.ricoh.co.jp

**1.4 Urgent call phone number** 145

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 as amended

### 2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

**Hazard pictograms** None.

**Signal word** None.

**Hazard statements** The mixture does not meet the criteria for classification.

### Precautionary statements

**Prevention** Not available.

**Response** Not available.

**Storage** Not available.

**Disposal** Not available.

**Supplemental label information** None.

**2.3. Other hazards** None known.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

## General information

| Chemical name     | %       | CAS-No. / EC No.       | REACH Registration No. | Index No. | Notes |
|-------------------|---------|------------------------|------------------------|-----------|-------|
| Polyester Resin   | 60 - 90 | Confidential           | Confidential           | -         |       |
| Classification: - |         |                        |                        |           |       |
| Carbon Black      | 1 - 10  | 1333-86-4<br>215-609-9 | 01-2119384822-32-xxxx  | -         |       |
| Classification: - |         |                        |                        |           |       |
| Silica            | 1 - 10  | 7631-86-9<br>231-545-4 | 01-2119379499-16-xxxx  | -         |       |
| Classification: - |         |                        |                        |           |       |
| Wax               | 1 - 10  | Confidential           | Confidential           | -         |       |
| Classification: - |         |                        |                        |           |       |

## Composition comments

This product does not contain any of the following RoHS substances as ingredients. Cadmium, Hexavalent Chromium, Mercury, Lead, Polybrominated biphenyls (PBB), Polybrominated diphenylethers (PBDE), Phthalate esters (DEHP, BBP, DBP, and DIBP), SVHC (substances of very high concern: published by ECHA).

## SECTION 4: First aid measures

**General information** Not available.

### 4.1. Description of first aid measures

**Inhalation** Move to fresh air. Get medical attention, if needed.  
**Skin contact** Wash off with soap and plenty of water.  
**Eye contact** Rinse with plenty of water. If eye irritation persists: Get medical advice/attention.  
**Ingestion** Gargle with plenty of water and move to a fresh air location. Please see a doctor if necessary.

**4.2. Most important symptoms and effects, both acute and delayed** Not available.

**4.3. Indication of any immediate medical attention and special treatment needed** Treat symptomatically.

## SECTION 5: Firefighting measures

**General fire hazards** Not available.

### 5.1. Extinguishing media

**Suitable extinguishing media** Water. Foam. Dry chemicals. Carbon dioxide (CO<sub>2</sub>).  
**Unsuitable extinguishing media** Not available.

**5.2. Special hazards arising from the substance or mixture** Like ordinary organic fine powder, it can burn explosively if scattered in the air.

### 5.3. Advice for firefighters

**Special protective equipment for firefighters** If necessary, wear appropriate protective equipment (gloves, glasses, mask, etc.). If you are burning a lot, you need normal fire protection equipment.  
**Special fire fighting procedures** No special fire extinguishing method is required. Generally, extinguish the fire with water or a fire extinguishing agent.

**Specific methods** Use standard firefighting procedures and consider the hazards of other involved materials.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** Not available.  
**For emergency responders** Not available.

**6.2. Environmental precautions** Do not discharge into drains, water courses or onto the ground. Avoid release to the environment.

**6.3. Methods and material for containment and cleaning up** Fine particles can form an explosive mixture with air, so make sure there is no fire around you. If there is a fire, remove it and then wipe it off with a cloth moistened with water to prevent the toner from scattering as much as possible. If it is unavoidable to use a vacuum cleaner, be sure to use a vacuum cleaner with dust-proof and explosion-proof safety measures.

**6.4. Reference to other sections** Not available.

## SECTION 7: Handling and storage

|                                                                   |                                                                                                                                                                |
|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7.1. Precautions for safe handling                                | No special precautions are necessary beyond normal good hygiene practices. See Section 8 for additional personal protection advice when handling this product. |
| 7.2. Conditions for safe storage, including any incompatibilities | Keep out of reach of children. Keep at a temperature not exceeding 35 °C in quality. Avoid direct sunlight in quality.                                         |
| 7.3. Specific end use(s)                                          | Not available.                                                                                                                                                 |

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

| Switzerland. SUVA Grenzwerte am Arbeitsplatz<br>Components | Type | Value    | Form             |
|------------------------------------------------------------|------|----------|------------------|
| Carbon Black (CAS 1333-86-4)                               | TWA  | 3 mg/m3  | Respirable dust. |
|                                                            |      | 10 mg/m3 | Inhalable dust.  |
| Silica (CAS 7631-86-9)                                     | TWA  | 4 mg/m3  |                  |

**Biological limit values** No biological exposure limits noted for the ingredient(s).

**Recommended monitoring procedures** Not available.

**Derived no effect levels (DNELs)** Not available.

**Predicted no effect concentrations (PNECs)** Not available.

### 8.2. Exposure controls

**Appropriate engineering controls** Proper ventilation should be provided. However, it is not necessary for the intended purpose.

#### Individual protection measures, such as personal protective equipment

**General information** No special protective equipment required.

**Eye/face protection** Not normally needed. If necessary, Wear eye/face protection.

#### Skin protection

**- Hand protection** Not normally needed. If necessary, Wear suitable gloves.

**- Other** Not normally needed. If necessary, Wear suitable protective clothing.

**Respiratory protection** Not required under normal usage conditions. However, if the specified exposure limit concentration is exceeded, use a licensed dustproof breathing device.

**Thermal hazards** Not applicable.

**Hygiene measures** Wash hands after handling.

**Environmental exposure controls** Not available.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|                                                          |                        |
|----------------------------------------------------------|------------------------|
| Physical state                                           | Solid.                 |
| Form                                                     | Powder.                |
| Colour                                                   | Black.                 |
| Odour                                                    | Slightly plastic odour |
| Odour threshold                                          | Not available          |
| Melting point/freezing point                             | Not available.         |
| Boiling point or initial boiling point and boiling range | Not applicable         |
| Flammability                                             | Not available.         |
| Flash point                                              | Not applicable         |
| Auto-ignition temperature                                | Not available.         |
| Decomposition temperature                                | Not available          |
| pH                                                       | Not applicable         |
| Kinematic viscosity                                      | Not available.         |
| Solubility                                               |                        |
| Solubility (water)                                       | Insoluble              |

|                                                                  |                                                           |
|------------------------------------------------------------------|-----------------------------------------------------------|
| Partition coefficient<br>(n-octanol/water) (log value)           | Not available                                             |
| Vapour pressure                                                  | Not applicable                                            |
| Density and/or relative density                                  |                                                           |
| Density                                                          | 1,50 g/cm3                                                |
| Vapour density                                                   | Not applicable                                            |
| Particle characteristics                                         | Not available.                                            |
| <b>9.2. Other information</b>                                    |                                                           |
| <b>9.2.1. Information with regard to physical hazard classes</b> | No relevant additional information available.             |
| <b>9.2.2. Other safety characteristics</b>                       | Dust explosion (like most finely grained organic powders) |
| Evaporation rate                                                 | Not applicable                                            |
| Flammability (temperature)                                       | Not flammable                                             |
| Softening point                                                  | 90 °C (194 °F)                                            |
| Viscosity                                                        | Not applicable                                            |

## SECTION 10: Stability and reactivity

|                                                 |                                                                                                          |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| <b>10.1. Reactivity</b>                         | The product is stable and non reactive under normal conditions of use, storage and transport.            |
| <b>10.2. Chemical stability</b>                 | Material is stable under normal conditions.                                                              |
| <b>10.3. Possibility of hazardous reactions</b> | Dust explosive, but under the intended conditions of use, the probability of dust explosion is very low. |
| <b>10.4. Conditions to avoid</b>                | None under normal conditions.                                                                            |
| <b>10.5. Incompatible materials</b>             | None under normal conditions.                                                                            |
| <b>10.6. Hazardous decomposition products</b>   | At thermal decomposition temperatures, carbon monoxide and carbon dioxide.                               |

## SECTION 11: Toxicological information

|                     |                |
|---------------------|----------------|
| General information | Not available. |
|---------------------|----------------|

### Information on likely routes of exposure

|              |                |
|--------------|----------------|
| Inhalation   | Not available. |
| Skin contact | Not available. |
| Eye contact  | Not available. |
| Ingestion    | Not available. |
| Symptoms     | Not available. |

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

| Product                                     | Species | Test Results                                                              |
|---------------------------------------------|---------|---------------------------------------------------------------------------|
| Print Cartridge Black IM C7010(Black toner) |         |                                                                           |
| <b>Acute</b>                                |         |                                                                           |
| <b>Oral</b>                                 |         |                                                                           |
| LD50                                        | Rat     | >= 5000 mg/kg Based on other product test results of similar ingredients. |

#### Skin corrosion/irritation

##### Irritation Corrosion - Skin: P.I.I. value

<= 1  
Species: Rabbit  
Notes: Based on other product test results of similar ingredients.

#### Serious eye damage/eye irritation

##### Irritation Corrosion - Eye

Result: Non-irritant  
Species: Rabbit  
Notes: Based on other product test results of similar ingredients.

|                           |                |
|---------------------------|----------------|
| Respiratory sensitisation | Not available. |
|---------------------------|----------------|

#### Skin sensitisation

#### **Skin Sensitisation**

Result: Non-skinsensitive

Species: Mouse

Notes: Based on other product test results of similar ingredients.

#### **Germ cell mutagenicity**

##### **Germ cell mutagenicity: Ames test**

Result: Negative

#### **Carcinogenicity**

In 1996, the IARC re-evaluated carbon black as a Group 2B carcinogen for which there is inadequate human evidence, but sufficient animal evidence. However, there is a two-year inhalation study for a toner containing carbon black, which demonstrated no association between toner exposure and tumour development in rats even if the amount of carbon black powder is changed.

#### **Reproductive toxicity**

Not available.

#### **Specific target organ toxicity - single exposure**

Not available.

#### **Specific target organ toxicity - repeated exposure**

Not available.

#### **Aspiration hazard**

Not available.

#### **Mixture versus substance information**

Not available.

#### **11.2. Information on other hazards**

##### **Endocrine disrupting properties**

Not available.

##### **Other information**

Not available.

### **SECTION 12: Ecological information**

#### **12.1. Toxicity**

This material is not expected to be harmful to aquatic life.

#### **12.2. Persistence and degradability**

Not available.

#### **12.3. Bioaccumulative potential**

Not available.

#### **Partition coefficient n-octanol/water (log Kow)**

Not available.

#### **Bioconcentration factor (BCF)**

Not available.

#### **12.4. Mobility in soil**

Not available.

#### **12.5. Results of PBT and vPvB assessment**

Not a PBT or vPvB substance or mixture.

#### **12.6. Endocrine disrupting properties**

Not available.

#### **12.7. Other adverse effects**

Not available.

### **SECTION 13: Disposal considerations**

#### **13.1. Waste treatment methods**

##### **Residual waste**

Not available.

##### **Contaminated packaging**

Not available.

##### **EU waste code**

Not available.

##### **Disposal methods/information**

Dispose of contents/container in accordance with local/regional/national/international regulations.

##### **Special precautions**

Do not throw in contents or fire containing contents.  
The contents will splash and cause burns.

### **SECTION 14: Transport information**

#### **ADR**

14.1. - 14.6.: Not regulated as dangerous goods.

#### **RID**

14.1. - 14.6.: Not regulated as dangerous goods.

#### **ADN**

14.1. - 14.6.: Not regulated as dangerous goods.

#### **IATA**

14.1. - 14.6.: Not regulated as dangerous goods.

#### **IMDG**

14.1. - 14.6.: Not regulated as dangerous goods.

**14.7. Maritime transport in bulk according to IMO instruments** Not applicable.

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU regulations

**Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**

Not listed.

**Regulation (EU) 2019/1021 On persistent organic pollutants (recast), as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**

Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

#### Authorisations

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**

Not listed.

#### Restrictions on use

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

Not listed.

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.**

Not listed.

#### Other EU regulations

**Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended**

Not listed.

#### National regulations

Not available.

**Switzerland. Schedules 1A-3B on Substances Subject to ChKV, Regulation on the Control of Chemicals with Civilian and Military Use (ChKV)**

Not listed.

### 15.2. Chemical safety assessment

Not available.

## SECTION 16: Other information

**List of abbreviations** Not available.

#### References

ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices  
HSDB® - Hazardous Substances Data Bank  
Japan Society for Occupational Health, Recommendation of Occupational Exposure Limits  
JIS Z 7252:2019 Classification of chemicals based on "Globally Harmonized System of Classification and Labelling of Chemicals (GHS)"  
JIS Z 7253:2019 Hazard communication of chemicals based on GHS - Labelling and Safety Data Sheet (SDS)  
National Toxicology Program (NTP) Report on Carcinogens  
US. IARC Monographs on Occupational Exposures to Chemical Agents  
• Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats H.Muhle et.al  
Fundamental and Applied Toxicology 17.280-299(1991)  
• Lung Clearance and Retention of Toner, Utilizing a Tracer Technique, during Chronic Inhalation Exposure in Rats B.Bellmann Fundamental and Applied Toxicology 17.300-313(1991)  
International Agency for Research on Cancer IARC: International Agency for Research on Cancer  
Carcinogenicity classification Group 1: Carcinogenic to humans  
Group 2A: Probably carcinogenic to humans  
Group 2B: May be carcinogenic to humans  
Group 3: Cannot be classified as carcinogenic to humans  
Group 4: Probably not carcinogenic to humans

|                                                                                              |                                                                                                          |
|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| <b>Information on evaluation method leading to the classification of mixture</b>             | Not available.                                                                                           |
| <b>Full text of any statements, which are not written out in full under sections 2 to 15</b> | None.                                                                                                    |
| <b>Revision information</b>                                                                  | None.                                                                                                    |
| <b>Training information</b>                                                                  | Not available.                                                                                           |
| <b>Disclaimer</b>                                                                            | The information in the sheet was written based on the best knowledge and experience currently available. |