Safety Data Sheet

SDS # : B-20040

Developer - Black

Issuing Date 2019-09-12  Revision Date 2019-09-12  Version 1

Active

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Name
Developer for iGen3 Digital Production Press, Xerox iGen4TM Press

Part no. 005R00647, 005R00651, 005R00663, 005R00692, 005R00705, 005R00708, 005R90262, 505S00001, 505S00006

Color Black
Pure substance/mixture Mixture

Relevant identified uses of the substance or mixture and uses advised against
Recommended Use Xerographic printing

Details of the supplier of the safety data sheet
Manufactured by Xerox Corporation
Webster, NY 14580
For further information, please contact
Contact person Manager, Environment, Health, Safety & Sustainability
E-mail address askxerox@xerox.com
Emergency telephone Safety Information US: (800) 275-9376
Chemical Emergency only (Chemtrec) (800) 424-9300

For the most current document https://safetysheets.business.xerox.com

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture
Customer use / Cartridges and sealed bottles

OSHA Hazard Classification This product is an article which contains a mixture / preparation in powder form. Safety information is given for exposure to the article as sold and used by the customer. Intended use of the product is not expected to result in exposure to the mixture / preparation based on the packaging and method of dispensing.

While this material is not considered hazardous by the OSHA hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information for the safe handling and proper use of the product. This SDS should be retained and made available to employees and other users of this product.

Label elements

Signal Word None
Hazard Statements
None required

Precautionary Statements
None required

Other hazards
Not a PBT according to REACH Annex XIII
May form explosible dust-air mixture if dispersed

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight %</th>
<th>Classification (Reg. 1272/2008)</th>
<th>Hazard Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel powder</td>
<td>7439-89-6</td>
<td>&gt;90</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Polyester resin</td>
<td>39382-25-7</td>
<td>3-6</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Carbon black</td>
<td>1333-86-4</td>
<td>&lt;1</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

"--" indicates no classification or hazard statements apply.

4. FIRST AID MEASURES

Description of first-aid measures

General advice
For external use only. When symptoms persist or in all cases of doubt seek medical advice.
Show this material safety data sheet to the doctor in attendance.

Eye contact
Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes

Skin contact
Wash skin with soap and water

Inhalation
Move to fresh air

Ingestion
Rinse mouth with water and afterwards drink plenty of water or milk

Most important symptoms and effects, both acute and delayed

Acute toxicity
Eyes
No known effect
Skin
No known effect
Inhalation
No known effect
Ingestion
No known effect

Chronic toxicity
No known effects under normal use conditions

Main symptoms
Overexposure may cause:
mild respiratory irritation similar to nuisance dust.

Aggravated Medical Conditions
None under normal use conditions

Indication of immediate medical attention and special treatment needed

Protection of first-aiders
No special protective equipment required

Notes to physician
Treat symptomatically

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media
Use water spray or fog; do not use straight streams, Foam

Unsuitable extinguishing media
Do not use a solid water stream as it may scatter and spread fire

Special hazards arising from the substance or mixture
Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard
Hazardous combustion products
Hazardous decomposition products due to incomplete combustion, Carbon oxides, Nitrogen oxides (NOx)

Advice for fire-fighters
In the event of fire and/or explosion do not breathe fumes. Wear fire/flame resistant/retardant clothing. Use self-contained pressure-demand breathing apparatus if needed to prevent exposure to smoke or airborne toxins. Wear self-contained breathing apparatus and protective suit

Other information
- Flammability: Not flammable. Will not readily ignite.
- Flash point: Not applicable

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Avoid breathing dust

Environmental precautions
No special environmental precautions required

Methods and material for containment and cleaning up
- Methods for containment: Prevent dust cloud
- Methods for cleaning up: Use a vacuum cleaner to remove excess, then wash with COLD water. Hot water fuses the toner making it difficult to remove

Reference to other sections
The environmental impact of this product has not been fully investigated. However, this preparation is not expected to present significant adverse environmental effects.

7. HANDLING AND STORAGE

Precautions for safe handling
Advice on safe handling: Handle in accordance with good industrial hygiene and safety practice, Avoid dust accumulation in enclosed space, Prevent dust cloud

Hygiene measures: None under normal use conditions

Conditions for safe storage, including any incompatibilities
- Technical measures and storage conditions: Keep container tightly closed in a dry and well-ventilated place, Store at room temperature
- Incompatible products: None

Specific end uses
- Xerographic printing

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters
Exposure Limits
- ACGIH TLV TWA: 10 mg/m³ (inhalable particles)
- ACGIH TLV TWA: 3 mg/m³ (respirable dust)
- OSHA PEL TWA: 15 mg/m³ (total dust)
- OSHA PEL TWA: 5 mg/m³ (respirable dust)
Xerox Exposure Limit 2.5 mg/m³ (total dust)
Xerox Exposure Limit 0.4 mg/m³ (respirable dust)

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black</td>
<td>TWA: 3 mg/m³</td>
<td>TWA: 3.5 mg/m³</td>
</tr>
</tbody>
</table>

Exposure controls

Engineering measures None under normal use conditions

Individual protection measures, such as personal protective equipment (PPE)

Eye/Face protection No special protective equipment required
Hand protection No special protective equipment required
Skin and body protection No special protective equipment required
Respiratory protection No special protective equipment required.
Thermal hazards None under normal processing

Environmental Exposure Controls Keep out of drains, sewers, ditches and waterways

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Powder</th>
<th>Odor</th>
<th>Faint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
<td>Odor threshold</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Color</td>
<td>Black</td>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiling point/range</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Softening point</td>
<td>49 - 60 °C / 120 - 140 °F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammability</td>
<td>Not flammable. Will not readily ignite.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Vapor pressure   | Not applicable  |       |       |
| Vapor density    | Not applicable  |       |       |
| Specific gravity | 4-5             |       |       |
| Water solubility | Negligible      |       |       |
| Partition coefficient | Not applicable |       |       |
| Autoignition temperature | Not applicable |       |       |
| Decomposition temperature | Not determined |       |       |
| Viscosity        | Not applicable  |       |       |
| Explosive properties | Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition |       |       |
| Oxidizing properties | Not applicable |       |       |

Other information

None

10. STABILITY AND REACTIVITY

Reactivity
No dangerous reaction known under conditions of normal use

Chemical stability
Stable under normal conditions.

**Possibility of hazardous reactions**

<table>
<thead>
<tr>
<th>Hazardous reactions</th>
<th>None under normal processing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous polymerization</td>
<td>Hazardous polymerization does not occur</td>
</tr>
</tbody>
</table>

**Conditions to avoid**

Prevent dust cloud. Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

**Incompatible Materials**

None

**Hazardous decomposition products**

None under normal use

### 11. TOXICOLOGICAL INFORMATION

The toxicity data noted below is based on the test results of similar reprographic materials.

#### Information on toxicological effects

**Acute toxicity**

**Product Information**

| Irritation | No skin irritation, No eye irritation |
| Oral LD50 | > 5 g/kg (rat) |
| Dermal LD50 | > 5 g/kg (rabbit) |
| LC50 Inhalation | > 5 mg/L (rat, 4 hr) |

#### Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LC50 Inhalation</th>
<th>Dermal LD50</th>
<th>Oral LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel powder</td>
<td></td>
<td></td>
<td>30 g/kg (rat)</td>
</tr>
<tr>
<td>Carbon black</td>
<td></td>
<td>3 g/kg (Rabbit)</td>
<td>15400 mg/kg (rat)</td>
</tr>
</tbody>
</table>

**Chronic toxicity**

| Sensitization | No sensitization responses were observed |
| Neurological Effects | No information available |
| Target organ effects | None known |

**CMR Effects**

| Mutagenic effects | Not mutagenic in AMES Test |
| Reproductive toxicity | This product does not contain any known or suspected reproductive hazards |
| Carcinogenicity | See "Other Information" in this section. |

**Chemical Name**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>NTP</th>
<th>IARC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black</td>
<td></td>
<td>2B</td>
</tr>
</tbody>
</table>

**Other information**

The IARC (International Agency for Research on Cancer) has listed carbon black as "possibly carcinogenic to humans". However, Xerox has concluded that the presence of carbon black in this mixture does not present a health hazard. The IARC classification is based on studies evaluating pure, "free" carbon black. In contrast, toner is a formulation composed of specially prepared polymer and a small amount of carbon black (or other pigment). In the process of making toner, the small amount of carbon black becomes encapsulated within a matrix. Xerox has performed extensive testing of toner, including a chronic bioassay (test for potential carcinogenicity). Exposure to toner did not produce evidence of cancer in exposed animals. The results were submitted to regulatory agencies and published extensively.

**Other toxic effects**

| Aspiration Hazard | Not applicable |
| Other adverse effects | None known |
12. ECOLOGICAL INFORMATION

Toxicity
On available data, the mixture / preparation is not harmful to aquatic life

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Toxicity to algae</th>
<th>Toxicity to fish</th>
<th>Toxicity to microorganisms</th>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel powder</td>
<td></td>
<td>LC50= 13.6 mg/L</td>
<td>Morone saxatilis 96 h</td>
<td></td>
</tr>
<tr>
<td>Carbon black</td>
<td></td>
<td>EC50 &gt; 5600 mg/L</td>
<td>24 h</td>
<td></td>
</tr>
</tbody>
</table>

Persistence and degradability
Not readily biodegradable

Bioaccumulative potential
Bioaccumulation is unlikely

Mobility in soil
Insoluble in water

Other adverse effects
The environmental impact of this product has not been fully investigated. However, this preparation is not expected to present significant adverse environmental effects.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods
Waste Disposal Methods
Can be landfilled or incinerated, when in compliance with local regulations
If incineration is to be carried out, care must be exercised to prevent dust clouds forming.

Contaminated packaging
No special precautions are needed in handling this material

Other information
Although toner is not an aquatic toxin, microplastics may be a physical hazard to aquatic life and should not be allowed to enter drains, sewers, or waterways.

14. TRANSPORT INFORMATION

This material is not subject to regulation as a hazardous material for shipping

15. REGULATORY INFORMATION

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

OSHA Regulatory Status
This product is an article which contains a mixture / preparation in powder form. Safety information is given for exposure to the article as sold and used by the customer. Intended use of the product is not expected to result in exposure to the mixture / preparation based on the packaging and method of dispensing.

Canada
This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR), and the SDS contains all the information required by the HPR.

International Inventories
TSCA
Complies
DSL/NDSL Complies

**U.S. Federal Regulations**

**SARA 313**
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**Clean Water Act**
This product is not regulated as a pollutant pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**
This product is not regulated as a hazardous air pollutant (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

**CERCLA**
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**US State Regulations**

**California Proposition 65**
Carbon black is regulated under California Proposition 65 only if in the form of "airborne, unbound particles of respirable size". Toner products do not contain carbon black in the form of "airborne, unbound particles of respirable size". Therefore, the requirements of Proposition 65 do not apply to this product.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>California Prop. 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black</td>
<td>1333-86-4</td>
<td>Carcinogen</td>
</tr>
</tbody>
</table>

**U.S. State Right-to-Know Regulations**
Although this product contains substances included in some U.S. State Right-to-Know regulations, the particles are bound in a unique matrix and, therefore, the product does not pose any specific hazard.

### 16. OTHER INFORMATION

**Issuing Date** 2019-09-12
**Revision Date** 2019-09-12
**Revision Note** Initial Release

**Disclaimer**
The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

end