**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

### Product Identifier
- **Product Name**
  - **Dry Ink**
  - **Toner Cartridge**
- **Part no.**

### 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
  - Rochester, NY 14644

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 (Chemetrec) (800) 424-9300

**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
No hazard expected under normal conditions of use

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>20-30</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Iron oxide</td>
<td>1317-61-9</td>
<td>10-15</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Carbon Black</td>
<td>1333-86-4</td>
<td>&lt;5</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Styrene/butadiene copolymer</td>
<td>9003-55-8</td>
<td>50-75</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

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

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)

Special protective actions 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.

Other information
- Flammable properties: 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)

<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)
Respiratory protection No special protective equipment required.
Eye/Face protection No special protective equipment required
Skin and body protection No special protective equipment required
Hand protection No special protective equipment required

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>Odor threshold</td>
<td>Not applicable</td>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
<td>Color</td>
<td>Black</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
<td>Boiling point/range</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Softening point</td>
<td>49 - 60 °C</td>
<td>120 - 140 °F</td>
<td>Autoignition</td>
</tr>
<tr>
<td></td>
<td></td>
<td>temperature</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

Flammability Limits in Air Not applicable

Vapor pressure Not applicable
Vapor density Not applicable
Water solubility Negligible
Viscosity Not applicable
Partition coefficient Not applicable
Evaporation rate Not applicable
Melting point/range Not determined
Freezing point Not applicable
Decomposition temperature Not determined
Specific gravity ~ 1

Other information
Explosive properties Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard

10. STABILITY AND REACTIVITY

Reactivity No dangerous reaction known under conditions of normal use

Chemical stability Stable under normal conditions
Possibility of hazardous reactions

Hazardous reactions: None under normal processing
Hazardous polymerization: Hazardous polymerization does not occur

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 to avoid

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>Iron oxide</td>
<td></td>
<td></td>
<td>10000 mg/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: No information available
Carcinogenicity: See "Other Information" in this section.

<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 Morone saxatilis 96 h</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbon Black</td>
<td></td>
<td></td>
<td></td>
<td>EC50 &gt; 5600 mg/L 24 h</td>
</tr>
</tbody>
</table>

Persistence and degradability

Not readily biodegradable

Bioaccumulative potential

Bioaccumulation is unlikely

Mobility in soil

Insoluble in water

Other adverse effects

Presents little or no hazard to the environment.

13. DISPOSAL CONSIDERATIONS

Disposal considerations

Waste Disposal Methods

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated packaging

No special precautions are needed in handling this material

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.

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.

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**

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>Complies</td>
</tr>
<tr>
<td>DSL/NDSL</td>
<td>Complies</td>
</tr>
</tbody>
</table>

**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.

**Chemical Name** | **CAS No.** | **California Prop. 65**
--- | --- | ---
Carbon Black | 1333-86-4 | Carcinogen

**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** | 1986-12-15
**Revision Date** | 2018-02-01
**Revision Note** | Update to Format

**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.