Material Safety Data Sheet

**Manufacturer:** Xerox Corporation
Rochester, NY 14644

**Telephone # (s):**

Safety Information: (800) 828-6571
Health Emergency: (585) 422-2177
Transportation Emergency (Chemtrec): (800) 424-9300

**Section I - Product Identification**

**Trade Names/Synonyms:** 3090 Developer

**Part No.:** 5R189

**WHMIS Status:** This is not a WHMIS controlled product.

**Ingredients (% by wt.)**

<table>
<thead>
<tr>
<th>Carrier (&gt;95%)</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cu-Zn-Mg ferrite powder</td>
<td>66402-68-4</td>
</tr>
<tr>
<td>Polyacrylate (&lt;1%)</td>
<td>9011-14-7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Toner (&gt;5%):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Styrene/acylate polymer (60-70%)</td>
</tr>
<tr>
<td>Acrylic resin (20-25%)</td>
</tr>
<tr>
<td>Carbon black (5-15%)</td>
</tr>
<tr>
<td>Polyolefin (&lt;5%)</td>
</tr>
</tbody>
</table>

**Section II - Emergency and First Aid**

**Primary Route of Entry:**
Inhalation
Eyes: Flush with water.
Skin: Wash with soap and water.
Inhalation:
Remove from exposure.

**Symptoms of Overexposure:**
Minimal respiratory tract irritation may occur as with exposure to large amounts of any non-toxic dust.

**Medical Conditions Generally Aggravated by Exposure:**
None when used as described by product literature.

**Ingestion:**
None.

**Additional Information:**
Dilute stomach contents with several glasses of milk or water.

**Section III - Toxicology and Health Information**

*The toxicity data noted below is based on the test results of this toner or similar reprographic materials:*

**Oral LD₅₀:** >5 g/kg (rats) practically non-toxic.

**Dermal LD₅₀:** >5 g/kg (rabbits) practically non-toxic.

**Inhalation LC₅₀:**

<table>
<thead>
<tr>
<th>Inhalation LC₅₀</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;5 mg/l (rats, 4 hr exposure)</td>
<td>Not established</td>
</tr>
<tr>
<td>&gt;20 mg/l (calculated 1 hr exposure)</td>
<td>Not established</td>
</tr>
</tbody>
</table>

**Eye Irritation:** Not an irritant

**Skin Sensitization:** Not a sensitizer.

**Skin Irritation:** Not an irritant

**Human Patch:** Non-irritating, non-sensitizing

**Mutagenicity:** No mutagenicity detected in Ames assay.

**Carcinogens:** None present

**Aquatic LC₅₀:** >1000 mg/l (fathead minnows) non-toxic.

**TLV:** 10 mg/m³ (inhalable particles)

**PEL:** 15 mg/m³ (total dust)

**STEL:** Not established

**Ceiling:** Not established

**XEL¹:** 2.5 mg/m³ (total dust)

**XEL¹:** 0.4 mg/m³ (respirable dust)

**Additional Information:** The results obtained from a Xerox sponsored Chronic Toner Inhalation Study demonstrated no lung change in rats for the lowest (1mg/m³) exposure level (the level most relevant to potential human exposure). A very slight degree of fibrosis was noted in 25% of the animals at the middle (4mg/m³) exposure level, while a slight degree of fibrosis was noted in all the animals at the highest (16 mg/m³) exposure level. These findings are attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged period. This study was conducted using a special test toner to comply with EPA testing protocol. The test toner was ten times more respirable than commercially available Xerox toner, and would not be functionally suitable for Xerox equipment.

XEL = Xerox Exposure Limit
Section IV - Physical Data

Appearance/Odor: Fine powder (black, green, blue, red, yellow or other colors) / faint odor
Softening Range: 120°F - 140°F
Boiling Point: Not applicable
Melting Point: N.D.
Solubility in Water: Negligible
Specific Gravity (H₂O=1): ~1
Evaporation Rate: Not applicable
Vapor Pressure (mm Hg): Not applicable
Vapor Density (Air=1): Not applicable
pH: Not applicable
Volatile: Not applicable % (Wt.) Not applicable % (Vol.)

Section V - Fire and Explosion Data

Flash Point (Method Used): Not applicable
Flammable Limits: LEL: Not applicable, UEL: Not applicable
NFPA 704: Consumer Use and Storage (“Cartridge” / “Bottle”) -- Health - 0, Fire -1, Reactivity – 0
Manufacturing Use and Storage (“Bulk Containers”) -- Health - 0, Fire -3, Reactivity - 0
Extinguishing Media: Avoid direct stream -- gently apply water mist, water fog, or foam
Special Fire Fighting Procedures: Avoid inhalation of smoke. Wear protective clothing and self-contained breathing apparatus.
Fire and Explosion Hazards: Toner is a combustible powder. Like most organic materials in powder form, it can form explosive mixtures when dispersed in air.

Section VI - Reactivity Data

Stability: Stable
Hazardous Polymerization: Will Not Occur
Hazardous Decomposition Products: Products of combustion may be toxic. Avoid breathing smoke.
Incompatibility (Materials to Avoid): None known

Section VII - Special Protection Information

Respiratory Protection: None required when used as intended in Xerox equipment.
Eye Protection: None required when used as intended in Xerox equipment.
Protective Gloves: None required when used as intended in Xerox equipment.
Other: For use other than normal customer - operating procedures (such as in bulk toner processing facilities), goggles and respirators may be required. For more information, contact Xerox.

Section VIII - Special Precautions

Handling and Storage: Keep container tightly closed.
Conditions to Avoid: Avoid prolonged inhalation of excessive dust.

Section IX - Spill, Leak, and Disposal Procedures

For Spills or Leakage: Sweep up or vacuum spilled toner and carefully transfer into sealable waste container. Sweep slowly to minimize generation of dust during clean 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 (See Section V). Residue can be removed with soap and cold water. Garments may be washed or dry-cleaned, after removal of loose toner.
Waste Disposal Method: This material is not a hazardous waste according to Federal Regulation 40 CFR 261 when disposed. State and Local requirements may, however, be more restrictive. Consult with the appropriate State and Local waste disposal authorities for additional information. Incinerate only in a closed container.

Section X - Transportation Information

This product is not regulated as a hazardous material