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: DocuPrint 350/425/500/700/850/1000  
Part No.: WH: 6R1048 (toner),  
5R646 (developer)  
XE: 106R408 (toner)  
113R466 (developer)

Chemical Name: None

WHMIS Status: This is not a WHMIS controlled product.

Ingredients (% by wt.)

<table>
<thead>
<tr>
<th>Toner:</th>
<th>Proprietary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyester resins (30-65%)</td>
<td></td>
</tr>
<tr>
<td>Carbon Black (1-10%)</td>
<td>1333-86-4</td>
</tr>
<tr>
<td>Wax (1-5%)</td>
<td>8015-86-9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Developer:</th>
<th>68186-94-7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manganese ferrite powder (90-99%)</td>
<td></td>
</tr>
<tr>
<td>Toner (1-10%)</td>
<td></td>
</tr>
</tbody>
</table>

Section II - Emergency and First Aid

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

Eyes: Flush with water.  
Medical Conditions Generally Aggravated by Exposure: None when used as described by product literature.

Skin: Wash with soap and cold water.  
Inhalation: Remove from exposure.  
Ingestion: Dilute stomach contents with several glasses of water.

Section III - Toxicology and Health Information

This material has been evaluated by Xerox Corporation. The toxicity data noted below is based on test results of similar reprographic toner materials

Oral LD₅₀: >5 g/kg (rats) practically non-toxic.  
TLV: 10 mg/m³ (total dust)

Dermal LD₅₀: >5 g/kg (rabbits) practically non-toxic.  
PEL: 15 mg/m³ (total dust)

Inhalation LC₅₀: >5 mg/l (rats, 4 hr exposure) practically non-toxic.  
STEEL: N.E.

>20 mg/l (rats, calculated 1 hr exposure) non-poisonous, DOT.  
Ceiling: N.E.

Eye Irritation: Not an irritant.  
XEL: 2.5 mg/m³ (total dust)

Skin Sensitization: Not a sensitizer.  
0.4 mg/m³ (respirable dust)

Skin Irritation: Not an irritant.  
Human Patch: Non-irritating/non-sensitizing.

Mutagenicity: No evidence of mutagenicity detected in Ames Assay.

Carcinogens: None present

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

Additional Information: The results obtained from a Xerox sponsored, Chronic Toner Inhalation Study, demonstrated no lung change in rats for the lowest (1 mg/m³) exposure level (i.e. the level most relevant to potential human exposure). A very slight degree of fibrosis was noted in 25% of the animals at the middle (4 mg/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  
N.A. - Not Applicable  N.E. - None Established  N.D. - Not Determined  * This MSDS can be used for both toner and developer

602E82590
**Section IV - Physical Data**

- **Appearance/Odor:** black powder/ faint odor
- **Softening Range:** 43.3 to 60.0 °C (110 to 140 °F)**
- **Boiling Point:** N.A.
- **Melting Point:** N.A.
- **Solubility in Water:** insoluble
- **Specific Gravity (H₂O=1):** ~1**
- **Evaporation Rate:** N.A.
- **Vapor Pressure (mm Hg):** N.A.
- **Vapor Density (Air=1):** N.A.
- **pH:** N.A.
- **Volatile:** N.D. % (Wt.) N.D. % (Vol.) ** Toner

**Section V - Fire and Explosion Data**

- **Flash Point (Method Used):** N.A.
- **LEL:** N.A., **UEL:** N.A.
- **NFPA 704:** Health – 0, Fire – 1, Reactivity - 0
- **Extinguishing Media:** Water spray, foam, dry powder.
- **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:** CO, CO₂ and other toxic products of combustion. 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:** Store at room temperature
- **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 waste disposal requirements may 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**

- **DOT Proper Shipping Name:** N.A. (Not Regulated)
- **ID Number:** N.A.
- **Hazard Classification:** N.A.
- **Packing Group:** N.A.