XEROX Material Safety Data Sheet

Manufacturer: Xerox Corporation  
Rochester, NY 14644  

Telephone #: Safety Information: (800) 828-6571  
Health Emergency: (805) 422-2177  
Transportation Emergency (Chemtrec): (800) 424-9300

Date: 5/9/90  
Revision: 8/21/06

Section I - Product Identification

Trade Names/Synonyms: 5380/5385 Red Developer  
Part No.: 5R196, 5R6282, 5R60274;  
XCI: 5R543;  
RX: 5R90167  

Chemical Name: None  

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>Iron ferrite powder (&gt;60%)</td>
<td>1309-38-2/1317-61-9</td>
</tr>
<tr>
<td>Styrene/acrylate copolymer (&gt;20%)</td>
<td>25213-39-2</td>
</tr>
<tr>
<td>Polyvinylidene fluoride (&lt;10%)</td>
<td>24937-79-9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Toner (&gt;5%)</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modified polyester/polystyrene-acrylate/polypropylene resin (65-70%)</td>
<td>-------</td>
</tr>
<tr>
<td>Styrene/acrylate polymer (20-25%)</td>
<td>26299-47-8</td>
</tr>
</tbody>
</table>

Section II - Emergency and First Aid

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

Eyes:
Flush with water.

Skin:
Medical Conditions Generally Aggravated by Exposure: 
Wash with soap and water. None when used as described by product literature.

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.

Oral LD₅₀: >5 g/kg (rats) practically non-toxic.¹
Dermal LD₅₀: >5 g/kg (rabbits) practically non-toxic.¹
Inhalation LC₅₀: >5 mg/l (rats, 4 hr exposure) practically non-toxic.¹ >20 mg/l (rats, calculated 1 hr exposure) non-poisonous, DOT.¹

Eye Irritation: Not an irritant.

Skin Sensitization: Not a sensitizer.¹

Skin Irritation: Not an irritant.¹

Human Patch: Non-sensitizing, non-irritating

Mutagenicity: No mutagenicity detected in Ames test.

Carcinogens: None present

Aquatic LC₅₀: >500 mg/l (rainbow trout) non-toxic.¹

TLV: 10mg/m³ (total dust)
PEL: 15 mg/m³ (total dust)
STEL: None established
XEL²: 2.5 mg/m³ (total dust)

Additional Information: In a Xerox sponsored chronic inhalation study in rats using a special test toner, there were no lung changes at all in the lowest exposure level (1mg/m³), the most relevant level to potential human exposures. A very slight degree of fibrosis was noted in 25% of the animals at the middle exposure level (4 mg/m³) while a slight degree of fibrosis was observed at the highest exposure level (16 mg/m³) in all animals. These findings are attributed to "lung overloading," a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. The special test toner was ten times more respirable than commercially available Xerox toner to comply with EPA testing protocol and would not function properly in Xerox equipment.

¹Based on testing of similar xerographic materials. ²XEL-Xerox Exposure Limit
Section IV - Physical Data

Appearance/Odor: Red powder/ faint odor
Boiling Point: N.A.
Solubility in Water: N.A.
Evaporation Rate: N.A.
Vapor Density (Air=1): N.A.
Volatile N.A.% (Wgt) N.A. % (Vol.)
Softening Range: N.A.
Melting Point: N.A.
Specific Gravity (H₂O=1): ~5
Vapor Pressure (mm Hg): N.A.
pH: N.A.

Section V - Fire and Explosion Data

Flash Point (Method Used): N.A.
Flammable Limits: LEL: N.A., UEL: N.A.
NFPA 704: Health –0, Fire-1, Reactivity-0
Special Fire Fighting Procedures: None
Fire and Explosion Hazards: None

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

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: None
Conditions to Avoid: Avoid prolonged inhalation of excessive dust.

Section IX- Spill, Leak, and Disposal Procedures

For Spills or Leakage: If spilled, sweep up or vacuum.
Waste Disposal Method: When disposed, this material is not a hazardous waste according to Federal Regulation 40 CFR 261. However, State and Local requirements may be more restrictive. Therefore, consultation with the appropriate State and Local waste disposal authorities is advised.

Section X - Transportation Information

DOT Proper Shipping Name: N.A. (Not Regulated)
Hazard Classification: N.A.
ID Number: N.A.
Packing Group: N.A.
600E45000