XEROX Material Safety Data Sheet

Manufacturer: Xerox Corporation
Rochester, N.Y. 14644

Telephone #s
Safety Information: (800) 828-6571
Health Emergency: (716) 422-2177
Transportation Emergency (Chemtrec): (800) 424-9300

Section I - Product Identification

Trade Names/Synonyms: ES 8180, MAX 200 Red Developer

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>
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<tbody>
<tr>
<td>Iron ferrite (&gt;60%)</td>
<td>1309-38-2</td>
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<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>
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<thead>
<tr>
<th>Toner (&lt;5%):</th>
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<tr>
<td>Styrene/butylacrylate copolymer (80-90%)</td>
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<tr>
<td>Red pigment (8-12%) 1</td>
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</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: Wash with soap and water.

Inhalation: Remove from exposure.

Additional Information:
Ingestion: None

Section III - Toxicology and Health Information

This material has been evaluated by Xerox Corporation. The toxicity data presented below is for toner only.

Oral LD50: >5 g/kg (rats) practically non-toxic. 2

Dermal LD50: >5 g/kg (rabbits) practically non-toxic. 2

Inhalation LC50: >5 mg/l (rats, 4 hr exposure) practically non-toxic. 2
>20 mg/l (rats, calculated 1 hr exposure) non-poisonous, DOT. 2

Eye Irritation: Not an irritant. 2

Skin Sensitization: Not a sensitizer. 2

Skin Irritation: Not an irritant. 2

Human Patch: Non-irritating, non-sensitizing. 2

Mutagenicity: No mutagenicity detected in Ames assay.

Carcinogens: None present

Aquatic LC50: >1125 mg/l (fathead minnows) non-toxic 2

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. The 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.

1 This ingredient is a toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. 2 Based on testing similar xerographic toner materials. 3 XEL-Xerox Exposure Limit

N.A. - Not Applicable  N.E. - None Established  N.D. - Not Determined

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XEROX  
Trade Name: ES 8180, MAX 200 Red Developer  
MSDS No.: B-0299

Section IV - Physical Data

Appearance/Odor: red powder / faint odor  
Softening Range: 85°C to 100°C
Boiling Point: N.A.  
Melting Point: N.A.
Solubility in Water: Negligible  
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.A.% (Wgt) N.A. % (Vol.)

Section V - Fire and Explosion Data

Flash Point (Method Used): N.A.*C N.A.*F  
LEL: N.A.  
UEL: N.A.
NFPA 704: Health-0, Fire-1, Reactivity-0
Extinguishing Media: Dry chemicals, CO₂, foam, water
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, when dispersed in air, it can form explosive mixtures.

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.

Handling and Storage: Use with adequate ventilation  
Conditions to Avoid: Avoid prolonged inhalation of excessive dust.

Section VIII - Special Precautions

For Spills or Leakage: If spilled, sweep or vacuum
Waste Disposal Method: This material is not a hazardous waste according to Federal Regulation 40 CFR 261. State and Local requirements may be more restrictive. Consult with the appropriate State and Local waste authorities for advise.

Section IX - Spill, Leak, and Disposal Procedures

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

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