XEROX

Material Safety Data Sheet

MSDS No: B-0253
Date: 6/13/88
Revision: 3/8/05

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:
5018/5021/5028/5034/5126/5321/5334/5624/5626
5818/5820/5828/5830/Bookmark-21/XC-1875/XC-2675
Blue Developer

Part No.: 97K6840, 502S30844

Chemical Name: None

WHMIS Status: This is not a WHMIS controlled product.

Ingredients (% by wt.)

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No.</th>
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</thead>
<tbody>
<tr>
<td>Steel powder (&gt;90%)</td>
<td>7439-89-6</td>
</tr>
<tr>
<td>Styrene/butadiene copolymer (&lt; 5%)</td>
<td>9003-55-8</td>
</tr>
<tr>
<td>Fluoropolymer (&lt; 2%)</td>
<td>24937-97-1</td>
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<tr>
<td>Carbon black (&lt; 1%)</td>
<td>1333-86-4</td>
</tr>
<tr>
<td>Blue pigment (&lt; 1%)</td>
<td>147-14-8</td>
</tr>
</tbody>
</table>

Section II - Emergency and First Aid

Primary Route of Entry:
Inhalation
Eyes:
Skin:
Inhalation:
Ingestion:

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.

Additional Information:
None.

Section III - Toxicology and Health Information

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

Oral LD$_{50}$: >10 g/kg (rats) practically non-toxic.
Dermal LD$_{50}$: >2 g/kg (rabbits) practically non-toxic.
Inhalation LC$_{50}$:
>5 mg/l (rats, 4 hr exposure) practically non-toxic.
>20 mg/l (rats, calculated 1 hr exposure) non-poisonous, DOT.

Eye Irritation: Not an irritant.
Skin Sensitization: Not a sensitizer.
Skin Irritation: Not an irritant.
Human Patch: Non-irritating, non-sensitizing.
Carcinogens: None present
Mutagenicity: No mutagenicity detected in Ames, CHO/SCE, CHO/HGPRT, and in vitro CHO Assays.
Aquatic LC$_{50}$: >1000 mg/l (fathead minnows) non-toxic.

TLV: 10 mg/m$^3$ (total dust)
PEL: 15 mg/m$^3$ (total dust)
STEL: 5 mg/m$^3$ (respirable dust)
XEL$^1$: 2.5 mg/m$^3$ (total dust)

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

Additional Information: The results obtained from a Xerox sponsored Chronic Toner Inhalation Study, demonstrated no lung change in rats for the lowest (1 mg/m$^3$) 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/m$^3$) exposure level, while a slight degree of fibrosis was noted in all the animals at the highest (16 mg/m$^3$) 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.

$^1$XEL-Xerox Exposure Limit
Section IV - Physical Data

Appearance/Odor: Blue 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. % (Wt)  N.A. % (Vol.)

Softening Range: N.A.
Melting Point: N.A.
Specific Gravity (H₂O=1): ~5
Vapor Pressure (mm Hg): 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
Extinguishing Media: Water, foam, dry chemical.

Special Fire Fighting Procedures: Avoid inhalation of smoke. Wear protective clothing and self-contained breathing apparatus.
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.
Eye Protection: None required when used as intended.
Protective Gloves: None required when used as intended.
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: 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.

Section X - Transportation Information

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

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