XEROX

Material Safety Data Sheet

MSDS No: A-0092
Date: 8/27/90
Revision: 03/19/03

Manufacturer: Xerox Corporation
Rochester, NY 14644

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

Section I - Product Identification

Trade Names/Synonyms: 5318/5320/5337/5340/5343/5343-C/5350/5352/C5352-C/5622/5665/5837/5845/5855 Red Dry Ink

Part No.: WH: 6R365, 8N06127; XCL: 6R550*; RX: 6R370, 6R90183; XLA: 6R375* *cancelled

Chemical Name: None

WHMIS Status: This is not a WHMIS controlled product.

Ingredients (% by wt.)
- Styrene/acrylate polymer (75-85%) 25767-47-9
- Red pigment (8-12%) 7585-41-3
- Polypropylene wax (5-10%) 9003-07-0
- Titanium dioxide (1-3%) 13463-67-7
- Quaternary ammonium salt (1-3%) 102561-46-6

CAS No.
25767-47-9
7585-41-3
9003-07-0
13463-67-7
102561-46-6

Section II - Emergency and First Aid

Primary Route of Entry:
- Inhalation
- Eyes:
  - Flush thoroughly with water.
- Skin:
  - Wash skin thoroughly with soap and water.
- Inhalation:
  - Remove from exposure. Observe for any difficulty in breathing.
- Ingestion:
  - Dilute stomach contents with several glasses of water.

Symptoms of Overexposure:
- Minimal respiratory tract irritation may occur 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 based on test results of similar xerographic toner materials.

Oral LD$_{50}$: $>5$ g/kg (rats) practically non-toxic.

Dermal LD$_{50}$: $>5$ g/kg (rats) practically non-toxic.

Inhalation LC$_{50}$: $>5$ mg/l (rats, 4 hr exposure)/practically non-toxic. $>20$ mg/l (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

Mutagenicity: Non-mutagenicity detected in Ames Assay.

Carcinogens: None present

Aquatic LC$_{50}$: $>1125$ mg/l (rainbow trout), non-toxic.

TLV: 10 mg/m$^3$ (total dust)

PEL: 5 mg/m$^3$ (respirable dust)

STEL: 15 mg/m$^3$ (total dust)

XEL: 5 mg/m$^3$ (respirable dust)

XEL$^2$: 2.5 mg/m$^3$ (total dust)

0.4 mg/m$^3$ (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/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 (4mg/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.

1This 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.

2XEL-Xerox Exposure Limit

N.A. - Not Applicable  N.E. - None Established  N.D. - Not Determined
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. % (Wt.)  N.A. % (Vol.)

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 - 3, Reactivity - 0
Extinguishing Media: Water, dry chemical, carbon dioxide 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: Use with adequate ventilation.
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 however, 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)
Hazard Classification: N.A.
ID Number: N.A.
Packing Group: N.A.