MATERIAL SAFETY DATA SHEET

Canon U.S.A., Inc.
One Canon Plaza
Lake Success, NY 11042
Telephone: 516-328-5600

24 hr. Emergency Contact
CHEMTREC: 800-424-9300

Date of preparation: 9/88
Date of revision: 4/94

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 IDENTIFICATION OF THE SUBSTANCE OR PREPARATION

Product Name: MP Cartridge 20P (For MP50/60/90)
ITEM Nos: M95-0401-000

DESCRIPTION: An assembly for Micro Printer 50 composed of a photosensitive drum, toner powder, developer unit, corona unit and cleaner blade. The toner powder cannot be removed unless the cartridge is forcibly broken.

1.2 COMPANY/UNDERTAKING IDENTIFICATION

Manufacturer: Canon Inc., Tokyo Japan
30-2, Shimomaruko 3-Chome, Ohta-Ku
Tokyo Japan
Phone: 03-3758-2111

Supplier: Canon USA, Inc.
One Canon Plaza
Lake Success, NY 11042
Phone: (516) 328-5600

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Weight %</th>
<th>(CAS Registry No.)</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>55 - 65</td>
<td>--------</td>
<td>Styrene Acrylate Copolymer</td>
</tr>
<tr>
<td>30 - 40</td>
<td>1317-61-9</td>
<td>Iron Oxide</td>
</tr>
</tbody>
</table>

(See SECTION 8 for Exposure Limits)

Manufacturer contact states all other information is proprietary.

SECTION 3. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW**

Toner Low Hazard For Recommended Handling.

SECTION 4. FIRST-AID MEASURES

Inhalation: If symptomatic, move to fresh air. Get medical attention if symptoms persist.

Eyes: Any material that contacts the eye should be washed out immediately with water. Get medical attention if symptoms occur.

Skin: Wash with soap and water. Get medical attention if symptoms occur.

Ingestion: Drink 1-2 glasses of water. Seek medical attention.
SECTION 5. FIRE FIGHTING MEASURES

Flash Point (Method Used): N/A
Ignition Temperature: N/A
Flammability: Non-flammable solid (According to test method of 16 CFR 1500.44).
Flammable Limits: N/A
Extinguishing Media: Water spray, carbon dioxide (CO2), dry chemical.
Special Fire Fighting Procedures: None
Hazardous Combustion Products: Carbon dioxide, carbon monoxide.
Unusual Fire and Explosion Hazards: Toner material, like most organic material in powder form, is capable of creating a dust explosion.

SECTION 6. ACCIDENTAL RELEASE MEASURES

No toner spillage occurs in normal operation or handling. If it should occur, avoid inhalation of the dust. Sweep material onto paper and dispose as plastic waste.

SECTION 7. HANDLING AND STORAGE

Personal Precautionary Measures: Avoid breathing dust. Use with adequate ventilation. Wash thoroughly after handling.
Prevention of Fire and Explosion: Keep from contact with oxidizing materials. Minimize dust generation and accumulation. Refer to Pamphlet No. 654, "Prevention of Fire and Dust Explosions in the Chemical, Dye, Pharmaceutical and Plastics Industries." Use adequate ventilation. Keep container closed.
Storage: 

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits: OSHA (TWA/PEL): 15mg/m³ (Total Dust)
ACGIH (TWA/TLV): 5mg/m³ (Respirable Fraction)
Ventilation: Good ventilation (typically 4-6 room volumes per hour) should be used. Ventilation rates should be matched to conditions.
Personal Protection: Good industrial hygiene practice should be followed which includes preventing eye contact, minimizing skin contact, inhalation.
Respiratory Protection: None should be needed.
Eye Protection: It is good industrial hygiene practice to minimize eye contact.
Skin Protection: For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn.
Recommended Decontamination Facilities: Washing facilities
SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Solid Powder
Color: Black
Odor: Slight Plastic odor
Specific Gravity: (Water=1): 1.4 - 1.6
Vapor Pressure (mmHg.): N/A
Vapor Density (Air=1): N/A
Evaporation Rate (Butyl Acetate=1): N/A
Volatile Fraction by Weight: 100 - 150 Degrees Centigrate
Melting Point: Negligible
Solubility in Water: Partially soluble in toluene and xylene.
Solubility in Organic Solvents: N/A
pH: N/A

SECTION 10. STABILITY AND REACTIVITY

Stability: Stable
Incompatibility: Strong oxidizing agents.
Hazardous Polymerization: Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

EFFECTS OF OVEREXPOSURE:

Health Hazards of Long-Term Exposure (Chronic): Based upon available data, human exposure to toner has been shown to cause minimal respiratory tract irritation as may occur with large amounts of any nontoxic dusts. The results of one animal study where rats inhaled toner that was ten times more respirable than commercially available toner were observed to have no lung changes at low exposures (the most relevant level to potential human exposures). At higher levels a slight degree of lung fibrosis was observed due to excessive amounts of dust retained in the lungs for a prolonged interval.

INHALATION: Expected to be a low hazard for recommended handling.
EYE: No specific hazards known. May cause transient irritation.
SKIN: Expected to be low hazard for recommended handling.
INGESTION: Expected to be low ingestion hazard.

Salmonella typhimurium assay (Ames test): Negative

SECTION 12. ECOLOGICAL INFORMATION

This material has not been tested for environmental effects. In a spill situation this material may be visually unpleasant; however, it is not expected to cause any adverse environmental effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Incinerate or landfill. Can be incinerated when in compliance with local regulations. Discharge, treatment, or disposal may be subject to national state, or local laws.
SECTION 14. TRANSPORTATION INFORMATION

For transportation information regarding this product, please phone Canon Headquarters; Lake Success New York, (516) 328-5600

D.O.T. SHIPPING NAME: Not Regulated
D.O.T. HAZARD CLASS: N/A
UN No.: N/A

SECTION 15. REGULATORY INFORMATION

- Material(s) known to the State of California to cause cancer: None
- Material(s) known to the State of California to cause adverse reproductive effects: None
- Carcinogenicity Classification (components present at 0.1% or more): None
- International Agency for Research on Cancer (IARC): None
- American Conference of Governmental Industrial Hygienists (ACGIH): None
- National Toxicology Program (NTP): None
- Occupational Safety and Health Administration (OSHA): None
- Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372:
  - Chromium(III) and compounds: 2.0 wt% (Maximum)
  - As chromium metal: 0.2 wt% (Maximum)
- TSCA STATUS: All chemical ingredients found on TSCA Inventory.
- RCRA STATUS: If discarded in its purchased form, this product would not be a hazardous waste either by listing or characteristic. However, under RCRA, it is the responsibility of the end-user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as hazardous waste. 40 CFR 261.20-24

SECTION 16. OTHER INFORMATION

U.S./Canada Label Statements: LOW HAZARD FOR RECOMMENDED HANDLING
Minimize dust generation and accumulation. Use with adequate ventilation.
IN CASE OF FIRE: Use Water spray, carbon dioxide (CO2), or dry chemical.
IN CASE OF SPILL: Sweep or scoop up and remove. Flush residual spill area with water.

The information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers and the protection of the environment.

PREPARED BY: Joseph Palmeri
TITLE: Regulatory Compliance Specialist
QUALITY MANAGEMENT DEPARTMENT
TELEPHONE No.: (516) 328-5600