**COVER LETTER**

for

Hewlett-Packard

LaserJet IIISi & 4Si

Toner Cartridge

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**P/N 92291A**

The Hewlett Packard 92291A toner cartridge, and the contents of the cartridge, are NOT a hazardous items as described by any known federal or state laws.

Because Hewlett Packard receives many inquiries as to the makeup of the toner cartridges used in the LaserJet family of printers, Hewlett Packard and Canon have chosen to provide answers to these inquiries by providing the information in the Material Safety Data Sheet (MSDS) format.

The use of this format is chosen as it aids readers familiar with the MSDS format in identifying quickly the information they seek.

The provision of a MSDS and the use of the format in no way implies an inferior or unsafe product. This format simply provides the requested information in a familiar layout.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Printer(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>92291A</td>
<td>Toner Cartridge</td>
<td>LaserJet IIISi (33471A &amp; 33471AB)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LaserJet 4Si (C3010A &amp; C3011A)</td>
</tr>
</tbody>
</table>

March 01, 1993

MSDS
## MATERIAL SAFETY DATA SHEET

**MANUFACTURER:**
CANON U.S.A., INC.
ONE CANON PLAZA
LAKE SUCCESS, NY 11042

**TELEPHONE:** 914-497-6000

**24 HR. EMERGENCY CONTACT:**
CHEMTREC: 800-424-9300

**DATE OF PREPARATION:** 7/91
**DATE OF REVISION:** 3/93

### SECTION 1 IDENTIFICATION

**PRODUCT NAME:** EP-N, EP-NII CARTRIDGE BLACK

**DESCRIPTION:** ASSEMBLY FOR EP-N, EP-NII CARTRIDGE IS COMPOSED OF A PHOTOSENSITIVE DRUM, TONER, DEVELOPER UNIT, A CHARGER-ROLLER AND CLEANER BLADE.

**CANON ITEM NO.:** R64-2002, R64-2014

**NFPA HAZARD RATINGS:** HEALTH=0, FLAMMABILITY=1, REACTIVITY=0

### SECTION 2 INGREDIENTS (TONER)

<table>
<thead>
<tr>
<th>CAS NO.</th>
<th>WT %</th>
<th>OSHA ACGIH</th>
</tr>
</thead>
<tbody>
<tr>
<td>STYRENE ACRYLATE CO-POLYMER</td>
<td>45-55</td>
<td>N/A</td>
</tr>
<tr>
<td>IRON OXIDE</td>
<td>(1317-61-9)</td>
<td>45-55</td>
</tr>
</tbody>
</table>

**MANUFACTURER CONTACT STATES ALL OTHER INFORMATION IS PROPRIETARY.**

N/A = NOT APPLICABLE

**CONCERNING CARCINOGENICITY, THE INGREDIENTS LISTED ABOVE ARE NOT LISTED ON THE LATEST NTP ANNUAL REPORT, IARC MONOGRAPHS, OR OSHA REGULATIONS.**

### SECTION 3 PHYSICAL DATA

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point:</td>
<td>NOT AVAILABLE FOR SOLID MIXTURES. 100 - 159 deg. C</td>
</tr>
<tr>
<td>Melting Point:</td>
<td>NEGligible</td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg):</td>
<td>NEGligible</td>
</tr>
<tr>
<td>Vapor Density (Air=1):</td>
<td>NEGligible</td>
</tr>
<tr>
<td>Solubility in Water:</td>
<td>PARTIALLY SOLUBLE IN TOLUENE AND XYLENS. 1.4 - 1.6</td>
</tr>
<tr>
<td>Solubility in Organic Solvents:</td>
<td>NEGligible</td>
</tr>
<tr>
<td>Specific Gravity (H2O=1):</td>
<td>NEGligible</td>
</tr>
<tr>
<td>Percent Volatile by Volume:</td>
<td>NEGligible</td>
</tr>
<tr>
<td>Evaporation Rate (Butyl Acetate=1):</td>
<td>NEGligible</td>
</tr>
<tr>
<td>pH in Concentrate:</td>
<td>CANNOT BE DETERMINED</td>
</tr>
<tr>
<td>pH in Dilution as Used:</td>
<td>CANNOT BE DETERMINED</td>
</tr>
</tbody>
</table>
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------SECTION 4 FIRE AND EXPLOSION HAZARD DATA------

FLASH POINT (METHOD USED): N/A
IGNITION TEMPERATURE: N/A
FLAMMABILITY: NON-FLAMMABLE SOLID (ACCORDING TO TEST METHOD 16 CFR 1500.44)
FLAMMABLE LIMITS: N/A
EXTINGUISHING MEDIA: WATER, DRY CHEMICAL, CARBON DIOXIDE
SPECIAL FIRE FIGHTING PROCEDURES: NONE
UNUSUAL FIRE AND EXPLOSION HAZARDS: THIS MATERIAL, LIKE MOST ORGANIC MATERIAL IN POWDER FORM, IS CAPABLE OF CREATING A DUST EXPLOSION.

------SECTION 5 HEALTH HAZARD DATA------

TONER POWDER IS NOT ACCESSIBLE, UNLESS CARTRIDGE IS FORCED OR BROKEN INTO.

A. EXPOSURE LIMITS: SEE SECTION 2.
   OSHA(TWA/PEL): 15 MG/M3 (TOTAL DUST)
   ACGIH(TWA/TLV): 5 MG/M3 (RESPIRABLE FRACTION)

B. EFFECTS OF OVEREXPOSURE: MINIMAL RESPIRATORY TRACT IRRITATION MAY OCCUR AS WITH EXPOSURE TO LARGE AMOUNTS OF ANY DUST.

C. TOXICITY DATA:
   TEST MUTAGENICITY SPECIES S. TYPHINUM RIBI SPECIES S. TYPHINUM RIBI
   SPECIES S. TYPHINUM RIBI

RESULT NEGATIVE

------SECTION 6 EMERGENCY FIRST AID PROCEDURES------

INHALATION: REMOVE FROM EXPOSURE.
EYE: NO SPECIFIC HAZARD IS KNOWN TO CARMEN. HOWEVER, ANY MATERIAL THAT CONTACTS THE EYE MAY BE IRRITATING. IN CASE OF EYE CONTACT, FLUSH WITH PLENTY OF WATER. IF IRRITATION PERSISTS CONTACT A PHYSICIAN.
SKIN: WASH WITH SOAP AND WATER.

------SECTION 7 REACTIVITY DATA------

STABILITY: STABLE
INCOMPATIBILITY OF TONER: STRONG OXIDIZERS
HAZARDOUS DECOMPOSITION PRODUCTS: AS WITH ANY OTHER ORGANIC MATERIAL, COMBUSTION WILL PRODUCE CARBON DIOXIDE AND, PROBABLY CARBON MONOXIDE.
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.
Spill, Leak and Disposal Procedures

Spills & Leaks: No toner spillage occurs in normal operation or handling. If it should occur, avoid inhalation of dust and sweep material onto paper for disposal.

Disposal Method: No special disposal technique required. Ensure compliance with federal, state and/or local regulations. Exhausted cartridge(s) may be considered plastic waste and is composed of plastic and metals.

Section 9 Special Protection Information

Ventilation: Good general ventilation should be sufficient.
Protective Gloves: None required.
Eye Protection: None required.
Other Protective Equipment: None.

Section 10 Special Precautions

Precautions to be taken in handling and storing:
Keep out of reach of children.
Keep away from contact with oxidizing materials.

Section 11 Regulatory Information

Chemicals required to report under SARA Title III, CERCLA: None
Department of Transportation

Proper Shipping Name: MAGNETIZED MATERIAL (10 OR MORE CARTRIDGES)
Hazard Class: 9
UN ID No.: UN 2807

All components are registered in accordance with TSCA.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any other process.