

TONER

Hewlett-Packard Company
 Boise Division
 Post Office Box 15
 Boise, Idaho 83707-0015



SEP 1 2 1994

**COVER LETTER
 for
 Canon EP-S Cartridge
 distributed as
 Hewlett Packard 92295A**

The Hewlett Packard 92295A (EP-s) cartridge, nor the contents of the cartridge, is NOT a hazardous item 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 an 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.

The following item is for correlation purposes:

Part No.	Description	Printer
92295A	EP-S Cartridge	LaserJet II (33440A & 33440AB)
		LaserJet IID (33447A & 33447AB)
		LaserJet III (33449A & 33449AB)
		LaserJet IIID (33459A & 33459AB)

June 17, 1992
 MSDSCVR.BUD

Manufacturer: Canon Inc.
30-2, Shimomaruko 3-Chome, Ohta-ku
Tokyo, Japan
Phone: 03-758-2111

MAY 07 1992

Distributor: Hewlett Packard Company
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Phone: (208) 323-2987

Date of preparation: September 8, 1989

SECTION 1 IDENTIFICATION

PRODUCT NAME: EP-S Cartridge HP 92295A

DESCRIPTION: An assembly for LBP-SX, composed of a photosensitive drum, black toner powder, a corona unit, a developer unit and a cleaner blade. The toner powder cannot be removed, until the cartridge is forced to be broken.

CANON ITEM NO: R64-0002-010

SECTION 2 INGREDIENTS OF TONER

<u>Principal Components(CAS No.)</u>	<u>wt%</u>	<u>USA OSHA*</u>	<u>ACGIH**</u>	<u>DFG***</u>
Styrene acrylate copolymer	35-45	-	-	-
Iron oxide (1317-61-9)	30-40	-	-	-
Styrene copolymer	20-30	-	-	-

SECTION 3 PHYSICAL DATA OF TONER

BOILING POINT: Not available for solid mixtures.
MELTING POINT: 100 - 150° C
VAPOR PRESSURE (mmHg.): Negligible
VAPOR DENSITY (AIR=1): Not applicable
SOLUBILITY IN WATER: Negligible
SOLUBILITY IN ORGANIC SOLVENTS: Partially soluble in toluene and xylene.
SPECIFIC GRAVITY (H₂O=1): 1.4 - 1.6
PERCENT VOLATILE BY VOLUME: Negligible
EVAPORATION RATE (BUTYL ACETATE=1): Negligible
pH IN CONCENTRATE: Cannot be determined.
pH IN DILUTION AS USED: Cannot be determined.
APPEARANCE AND ODOR: Toner is fine powder, with slight plastic odor.

- * The column "OSHA" reveals PEL (Permissible Exposure Limit) under Occupational Safety and Health Administration.
** The column "ACGIH" reveals TLV (Threshold Limit Value) under American Conference of Governmental Industrial Hygienists.
*** The column "DFG" reveals MAK (Maximale Arbeitsplatzkonzentrationen) under Deutsche Forschungsgemeinschaft.

SECTION 4 FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used): No data available
 IGNITION TEMPERATURE: No data available
 FLAMMABILITY: Non-flammable solid (According to test method of USA 16 CFR 1500.44 and 84/449/EEC (Annex V) A.10.)
 FLAMMABLE LIMITS: No data available
 EXTINGUISHING MEDIA: CO₂, water, dry chemicals.
 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, until the cartridge is forced to be broken.

EXPOSURE LIMITS:

USA OSHA(TWA*/PEL): 15 mg/m³ (Total dust)
 5 mg/m³ (Respirable fraction)
 ACGIH(TWA/TLV): 10 mg/m³ (Total dust)
 DFG(MAK): 6 mg/m³ (Feinstaubkonzentration)
 and see SECTION 2.

EFFECTS OF OVEREXPOSURE:

Inhalation : Toner is finely divided solid. Do not breathe the dust.

Eye contact : No specific hazard is known to Canon. However, any material that contacts the eye may be irritating.

Skin contact : Low hazard for industrial handling.

No data available for chronic effects of overexposure.

EMERGENCY AND FIRST AID PROCEDURES:

In case of eye contact, flush with plenty of water.

TOXICITY DATA:

Mutagenicity: Negative (Test species: S. typhimurium)

CARCINOGENICITY:

No carcinogen or potential carcinogen, according to IARC Monographs**, NTP***, OSHA(USA) regulation and EC Directive.

SECTION 6 REACTIVITY DATA

STABILITY:

Stable

INCOMPATIBILITY:

Strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS:

Combustion will produce carbon dioxide and, possibly toxic chemicals such as carbon monoxide.

HAZARDOUS POLYMERIZATION:

Will not occur.

* The term "TWA" stands for Time Weighted Average.

** The term "IARC" stands for International Agency for Research on Cancer.

*** The term "NTP" stands for National Toxicology Program (USA).

SECTION 7 SAFE USE OR HANDLING

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

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

WASTE DISPOSAL METHOD:

The waste toner could be considered as plastic waste. For incineration, package it adequately. Do not disperse the toner into fire. Disposal should be subject to federal, state or local laws.

SECTION 8 SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:	None required.
VENTILATION:	Good general ventilation should be sufficient.
PROTECTIVE GLOVES:	None required.
EYE PROTECTION:	None required.
OTHER PROTECTIVE EQUIPMENT:	None required.

SECTION 9 SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Keep out of reach of children.
Keep away from contact with oxidizing materials.

SECTION 10 USA INFORMATION

CHEMICALS REQUIRED TO REPORT UNDER SARA TITLE III, CERCLA:

Chromium(III) and compounds:	1.9 wt%
(As chromium metal:	0.17 wt%)

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. And, it is based on the level of our knowledge as of the date of preparation.