# Canon

MATERIAL SAFETY DATA SHEET

Manufacturer:

Canon Inc.

30-2, Shimomaruko 3-chrome, Ohta-ku

Tokyo, Japan

Phone: 03-758-2111

Distributor:

Apple LaserWriter II Part number M6002

Date of Preparation: Nov. 15, 1988

SECTION 1 IDENTIFICATION

PRODUCT NAME

EP-S-Cartridge (Black)

STOCK # 5C 483

DESCRIPTION

An assembly for LBP-SX, composed of photosensitive drum, toner powder, corona units and a cleaner blade. The toner powder cannot be

removed until the cartridge is forced to be broken.

CANON ITEM NO:

R64-0001, R64-0002 (Net: 280g)

### SECTION 2 - INGREDIENTS OF TONER

PRINCIPAL COMPONENTS	<u>wt (%)</u>	USA <u>OSHA</u> *	ACGIH**	<u>MAK</u> ***
Styrene acrylate copolymer (25586-20-3)	30-40	-		-
Styrene copolymer (25215-62-7)	20-30	-		
Iron Oxide (1317-61-9)	30-40	-	-	-

### SECTION 3 PHYSICAL DATA OF TONER

BOILING POINT (C°):
MELTING POINT (C°):
VAPOR PRESSURE (mmHg):
VAPOR DENSITY (AIR=1):
SOLUBILITY IN WATER:

Not available for solid mixtures.

100 - 150°C Negligible Not applicable. Negligible

SOLUBILITY IN ORGANIC SOLVENTS:

Partially soluble in toluene and xylene.

SPECIFIC GRAVITY (H2O=1):

1.4 - 1.6

PERCENT VOLATILE BY VOLUME (%): EVAPORATION RATE (BUTYL ACETATE = 1):

PH IN CONCENTRATE: PH IN DILUTION AS USED: APPEARANCE AND ODOR:

Negligible Negligible

Cannot be determined. Cannot be determined.

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 term "MAK" stands for Macimale Arberitsplatzkonzentrationen Werte (West Germany)

## SECTION 4 FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:

**IGNITION TEMPERATURE:** 

FLAMMABILITY:

FLAMMABLE LIMITS:

EXTINGUISHING MEDIA: SPECIAL FIRE FIGHTING PROCEDURES:

UNUSUAL FIRE AND EXPLOSION HAZARDS:

No data available. No data available.

Non-flammable solid (According to test method of USA 16 CFR 1500.44 and 84/449/EC

(Annex V) A.10).

No data available.

CO2, water, dry chemicals.

None

Toner material, like most organic material in powder form, is capable of creating a dust

explosion.

### SECTION 5 HEALTH HAZARD DATA OF TONER

Toner powder is not accessible until the cartridge is forced to be broken

EXPOSURE LIMITS:

TLV: 10 mg/m<sup>3</sup> (Total dust)

PEL: 15 mg/m<sup>3</sup> (Total dust)

5 mg/m<sup>3</sup> (Respirable fraction)

 $MAK: 6 mg/m^3$ 

(Feinstaubkonzentration)

See SECTION 2

EFFECTS OF OVEREXPOSURE:

Inhalation: Gasping. Do not breathe the dust No specific hazard is known to Canon. Eye contact:

However any material that contacts the eye may

be irritating.

Skin contact:

Low hazard for industrial handling.

No data is available for chronic effects of overexposure.

EMERGENCY AND FIRST AID PROCEDURES:

TOXICITY DATA:

In case of eye contact, flush with plenty of water

Skin irritation: Non-irritant Eye irritation: Non-irritant Negative mutagenicity

(Test species: S. Typhimurium)

CARCINOGENICITY

No carcinogen or potential carcinogen according to IARC Monograph\*\*, NTP\*\*\*, OSHA (USA)

regulation and EC Directive.

Some of the information reported here is test data of similar product.

The term "IARC" stands for International Agency for Research on Cancer. The term "NTP" stands for National Toxicology Program (USA).

#### SECTION 6 REACTIVITY DATA

STABILITY:

Stable

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INCOMPATIBILITY:

Strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS:

Combustion will produce carbon dioxide and

probably carbon monoxide.

HAZARDOUS POLYMERIZATION:

Will not occur

#### SECTION 7 SPILL OR LEAK PROCEDURES

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 and collect

it.

WASTE DISPOSAL METHOD:

The waste toner could be considered as a plastic waste. For incineration package it accordingly. Do not disperse the toner into fire. Disposal may

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. None required.

EYE PROTECTION: OTHER PROTECTIVE EQUIPMENT:

None

#### SECTION 9 SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Keep out of reach of children.

Keep from contact with oxidizing materials.

None

### SECTION 10 USA INFORMATION

CHEMICALS REQUIRED TO REPORT UNDER SARA TITLE III:

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



Apple Computer, Inc. US Customer Support Center 2420 Ridgepoint Dr. Austin, TX 78754 Price, Robert



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**Rose Sarouhanian** Schoolcraft College

**LW2 Toner cart MSDS** 

5c# 483 EPs-Cartrelge (Black)

Rose,

Here is a material safety data sheet for the Laserwriter II toner cartridge. I'm still trying to track one down for the Stylewriter cartridge and will send one once I locate one.

cordially, Robert