TONER

JUN 2 4 1994

MSDS#: LBP-0022-003 (1/4)

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: 11/87 Date of revision: 3/94

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

IDENIFICATION OF THE SUBSTANCE OF PREPARATION

Product Name:

EP CARTRIDGE BLACK

ITEM Nos:

R34-0011, R34-0012 (Weight) N/A

DESCRIPTION:

An assembly for Laser beam Printer, composed of a photosensitive drum, toner powder, developer unit, corona unit and cleaner blade. The toner powder cannot be removed unless the cartridge is forced

and broken.

1.2 COMPANY/UNDERTAKING INDENTIFICATION

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

For other Information; call the Marketing and Distribution Center in Your Area.

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

Weight % -(CAS Registry No.) Component

1317-61-9

Styrene Acrylate Copolymer Iron Oxide

(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:

Ingestion:

move to fresh air. Get medical attention if

If symptomatic, move to fresh air. Get medical attention i symptoms persist. Any material that contacts the eye should be washed out immediately with water. Get medical attention if symptoms occur.

Skin:

Eves:

Wash with soap and water. Get medical attention if symptoms occur.
Drink 1-2 glasses of water. Seek medical attention.



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SECTION 5. FIRE FIGHTING MEASURES

Flash Point(Method Used): Ignition Temperature: Flammability:

Flammable Limits: Extinguishing Media:

Special Fire Fighting Procedures: Hazardous Combustion Products: Unusual Fire and Explosion Hazards:

N/A N/A Non-flammable solid (According to test method of 16 CFR 1500.44). Water spray, carbon dioxide (CO2), dry chemical. None

Carbon dioxide, carbon monoxide.
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 of collected toner 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:

nandling.
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.
Store in a cool place.

Storage:

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:

Ventilation:

OSHA (TWA/PEL): 15mg/m3 (Total Dust)
5mg/m3 (Respirable Fraction)
ACGIH (TWA/TLV): 10mg/m3 (Total Dust)
Good ventilation (typically 4-6 room volumes per hour) should be used. Ventilation rates should

Personal Protection:

Respiratory Protection: Eye Protection:

Skin Protection:

Good ventilation (typically 4-6 room volumes per hour) should be used. Ventilation rates should be matched to conditions. Good industrial hygiene practice should be followed which includes preventing eye contact, minimizing skin contact and inhalation. None should be needed. It is good industrial hygiene practice to minimize eye contact. For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn.

worn.

Recommended Decontamination Facilities: Washing facilities



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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form:
Color:
Color:
Odor:
Specific Gravity: (Water=1):
Vapor Density (Air=1):
Evaporation Rate (n-Butyl Acetate=1):N/A.
Evaporation Point:
Solubility in Water:
Solubility in Organic Solvents:
PH:

Fine powder
Black
Typical plastic odor
1.4 - 1.6
N/A

100 - 150 Degrees Centigrade
Negligible
Partially soluble in toluene and xylene.
N/A

SECTION 10. STABILITY AND REACTIVITY

Stability:
Incompatibility:
Hazardous Polymerization:
Hazardous Decompostion Products:
Combustion will produce carbon dioxide, and carbon monoxide.

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 avaiable toner were observed to have no lung changes at low exposures (the most relevant level to potential human expsoures). 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.



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SECTION 14. TRANSPORTATION INFORMATION

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

Not Regulated

D.O.T. SHIPPING NAME: D.O.T. HAZARD CLASS: UN No.:

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):

- 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 ingedients 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: TITLE:

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