MATERIAL SAFETY DATA SHEET

DATE PREPARED: 6th April 1998

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Identification of the Substance or Preparation

- Product Name: E-30 Cartridge (Black)
- Description: An assembly for copying machine, FC200, FC204, FC204S, FC206, FC208, FC210, FC220, FC224, FC224S, FC226, FC228, FC230, FC310, FC330, FC336, FC530, PC740, PC760, PC770, PC780, PC860, PC880, PC890 composed of a photosensitive drum, toner powder, a developer unit, a charger and a cleaner blade. The toner powder cannot be removed, until the cartridge is forced to be broken.

1.2 Company Undertaking Identification

- Manufacturer: Canon Inc. Phone: 03-3758-2111
- Distributor: Canon (UK) Limited Woodhatch Reigate Surrey Telephone: (01737) 220000

SECTION 2: COMPOSITION/INFORMATION OF INGREDIENTS

Principal Components	Wt%	CAS #	EU Symbol	EU R-Phrase	DFG MAK
Styrene acrylate copolymer	45-55	-	-	-	-
Iron oxide	40-50	1317-61-9	-	-	-

All MSDS sheets have been updated to appear in the current 16 paragraph format(previously nine), information requested for the new format which isn't available from the previous format will have No Data Available against it.(As advised by Sedgwick Risk Consultants. Memo dated 28/02/97).

SECTION 3. HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW:

Black fine powder, slight plastic odour.

POTENTIAL HEALTH EFFECTS AND SYMPTOMS:

INGESTION:	Not applicable route of entry for intended use.
INHALATION:	Minimal respiratory tract irritation may occur as with exposure to large amounts of any non-toxic dust.
EYE CONTACT:	May cause eye irritation.
SKIN CONTACT:	Unlikely to cause skin irritation.
Chronic Effects: Medical Conditions Generally	No data available.

No data available.

SECTION 4. FIRST AID MEASURES

known to be Aggravated by Exposure:

FIRST AID MEASURES:	
INHALATION:	Remove victim to fresh air.
INGESTION:	Dilute stomach contents with several glasses of water.
EYE CONTACT:	Flush with running water for at least 15 minutes.
SKIN CONTACT:	Wash with soap and water.
Note to Physicians:	None.

SECTION 5. FIRE FIGHTING MEASURES

FIRE FIGHTING MEASURES:	
EXTINGUISHING MEDIA:	CO ₂ , water, dry chemicals,
UNSUITABLE	
EXTINGUISHING MEDIA:	None.
SPECIAL FIRE FIGHTING PROCEDURE:	None
UNUSUAL FIRE AND EXPLOSIVE HAZARDS:	Toner material, like most organic
	material in powder form, is capable of

FIRE AND EXPLOSIVE PROPERTIES: FLASH POINT(^OC): FLAMMABLE (EXPLOSIVE) LIMITS: AUTO-IGNITION TEMPERATURE (^OC): FLAMMABILITY:

cap creating a dust explosion.

No data available. No data available. No data available. Non-flammable solid. (according to test methods of USA 16 CFR 1500.44 and 84/449/EEC (Annex V) A.10).

AUTOFLAMMABILITY:	Not applicable
EXPLOSIVE PROPERTIES:	No data available.
OXIDISING PROPERTIES:	No data available.
HAZARDOUS COMBUSTION	
PRODUCTS:	No data available.
OTHER PROPERTIES:	No data available.

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:	Avoid inhalation of the dust.
ENVIRONMENTAL PRECAUTIONS:	No data available.
METHOD FOR CLEANING UP:	Sweep material onto paper and carefully
	transfer to a sealable waste container.

SECTION 7. HANDLING AND STORAGE

HANDLING:

STORAGE:

No toner spillage should occur in normal operation or handling. Keep out of reach of children. Keep away from contact with oxidising materials.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES:

USA OHSA (TWA/PEL):

15mg/m³ (Total Dust).
5 mg/m³ (Respirable Fraction)
ACGIH (TWA/TLV);
10 mg/m³ (Total Dust)
3 mg/m³ (Respirable)
DFG (MAK):
6 mg/m³ (Feinstaubkonzentration)
(Also refer to Section 2).

ENGINEERING CONTROLS:

PERSONAL PROTECTION EQUIPMENT(S): RESPIRATORY PROTECTION: EYE/FACE PROTECTION: SKIN PROTECTION: Good general ventilation should be sufficient under intended use.

Not Required Not Required Not Required

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: ODOUR: pH: BOILING POINT/RANGE (^oC): Black fine powder. Slight plastic odour. Not applicable. Not applicable.

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MELTING POINT/RANGE (°C): DECOMPOSITION TEMPERATURE (°C): FLASH POINT ($^{\circ}C$): FLAMMABLE (EXPLOSIVE) LIMITS: AUTOIGNITION TEMPERATURE ($^{\circ}C$): FLAMMABILITY: AUTOFLAMMABILITY: **EXPLOSIVE PROPERTIES:** OXIDISING PROPERTIES: VAPOUR PRESSURE: VAPOUR DENSITY (Air=1): DENSITY/SPECIFIC GRAVITY: WATER SOLUBILITY: FAT SOLUBILITY: PARTITION COEFFICIENT (N-OCTANOL/WATER): PERCENT VOLATILE: **EVAPORATION RATE:**

100-150°C. No data available. Not applicable. Not applicable. 1.4 - 1.8 Negligible. Partially soluble in toluene and xylene.

Not applicable. Not applicable. Not applicable.

Stable

SECTION 10. STABILITY AND REACTIVITY

STABILITY:
CONDITIONS TO AVOID:
MATERIALS TO AVOID:
HAZARDOUS DECOMPOSITION PRODUCTS:

HAZARDOUS POLYMERISATION:

No data available. Strong oxidisers Combustion will produce carbon dioxide and, possibly toxic chemicals such as carbon monoxide. Will not occur. No data available.

SECTION 11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

CONDITIONS TO AVOID:

INHALATION: INGESTION:	No data available. Oral LD50:>5000mg/kg (rats).
SKIN CONTACT:	Not classified as irritant, according to OSHA Hazard Communication Standard
	(HCS) and EU Directive 67/548/EEC
	based on test data of rabbits.
EYE CONTACT:	Not classified as irritant, according to
	OSHA Hazard Communication Standard
	(HCS) and EU Directive 67/548/EEC
	based on test data of rabbits.
SENSITISATION:	No data available.
MUTAGENICITY:	Negative. (Ames Test: Salmonella
	typhimurium.).

REPRODUCTIVE TOXICITY: CARCINOGENICITY: No data available. No carcinogen or potential carcinogen according to IARC Monographs, NTP, OSHA (USA) regulation and EU Directive None..

OTHERS:

SECTION 12. ECOLOGICAL INFORMATION

No data are available as to its effects on the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

METHOD OF DISPOSAL:

The waste toner could be considered as plastic powder waste. Disposal should be subject to federal, state or local laws.

SECTION 14. TRANSPORT INFORMATION

UN#:	None
UN SHIPPING NAME:	None
UN CLASSIFICATION:	None
UN PACKING GROUP:	None
SPECIAL PRECAUTION:	None

SECTION 15. REGULATORY INFORMATION

EU INFORMATION

INFORMATION ON THE LABEL: SYMBOL AND INDICATION: RISK PHRASE: DANGEROUS INGREDIENTS:

Not required. Not required. None.

Specific provisions in relation to protection of man or the environment.

76/769/EEC: (EC)3093/94: (EEC) 2455/92: Others:

USA Information: Information on the Label:

Signal Word:

Not required. Not required. Not required. None

Not required.

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MSDS3059 (E-30 Cartridge)

Hazard warning: Safety Advice: Hazardous Component(s):	Not required. Not required. Not required.
SARA Title III \$313: Chemical Name None	Weight %
California Proposition 65: Chemical Name None	Weight %
SECTION 16 OTHER INFORMATION	

SECTION 16. OTHER INFORMATION Literature Reference:

- U.S. Department of Labour, 29CFR Part 1910

- U.S. Environmental Protection Agency, 40CFR Part 372

- U.S. Consumer Product Safety Commission, 16CFR Part 1500

- ACGIH, Threshold Limit Values for Chemical Substances and Physical

Agents and Biological Exposure Indices

- U.S. Department of Health and Human Services National Toxicology Program, Annual Report on Carcinogens

- World Health Organisation International Agency for Research on Cancer,

IARC Monographs on the Evaluation on the Carcinogenic Risk of Chemicals to Humans

- DFG, List of MAK and BAT Values

- EU Directive 76/769/EEC, 67/548/EEC, 88/379/EEC and their amendments.

- EU Regulation (EC) 3093/94, (EEC)2455/92 and their amendments.

Other Information:

None

ABBREVIATIONS:

- (01) "EU" stands for European Union.
- (02) 'OSHA PEL' stands for PEL (Permissible Exposure Limit) under Occupational Safety and Health Administration.
- (03) "ACGIH TLV" stands for TLV (Threshold Limit Value) under American Conference of Governmental Industrial Hygienists.
- (04) "IARC" stands for International Agency for Research on Cancer.
- (05) "NTP" stands for National Toxicology Program (USA).
 'EU ILV' stands for Indicative Limit Values for Occupational Exposure under EU Directive 91/322/EEC.
 "DFG MAK" stands for MAK (Maximale Arbeitsplatzkonsentrationen) under Deutsche Forschungsgemeinschaft

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.