# MATERIAL SAFETY DATA SHEET

Manufacturer: Canon Inc:

30-2, Shimomaruko 3-Chome, Ohta-Ku

Tokyo JAPAN

**Telephone number:** 03 758 2111

**Distributor:** Canon (UK) Ltd.

**Date of preparation:** 9<sup>th</sup> January 2002

#### **SECTION 1 - IDENTIFICATION**

**Product Name:** FX-3 cartridge

**Description:** An assembly for facsimile L260i, L240, L300, L250, L350, L360,

L200, L280, L390, MultiPass L60 & MultiPass L90 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.

## **SECTION 2 - INGREDIENTS**

<b>Principle Components</b>	Wt %	USA OSHA ACGIH DFG
Styrene acrylate copolymer Iron oxide (1317-61-9)	45-55 45-55	

**OSHA** This column reveals the PEL (Permissible Exposure Limit) under the

Occupational Safety and Health Administration.

**ACGIH** This column reveals the TLV (Threshold Limit Value) under the

American Conference of Governmental Hygienists.

**DFG** This column reveals the MAK (MaximumArbeitsplatzkonzentrationen)

under the Deutsche Forschungsgemeinschaft

#### **SECTION 3 - PHYSICAL DATA:**

Boiling point (°C): Not Applicable

Melting Point (°C): 100-150 °C (softening point)

Vapour Pressure (mmHg):

Vapor Density (AIR=1)

Solubility in Water:

Not Applicable

Negligible

Solubility in Organic Solvents: Partially soluble in toluene and xylene

Specific Gravity (H2O=1): 1.4-1.8

Percent Volatile by Volume (%)

Evaporation Rate (BUTYL ACETATE=1)

Not Applicable

Not Applicable

Appearance and Odour: Fine black powder, slight

plastic odour.

#### SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

Flash Point: No Data Available Ignition temperature: No Data Available

Flammability: Non-flammable solid (According to test

methods of USA 16CFR 1500.4 and 84/449/EEC (Annex V) A.10.)

Flammable Limits: No Data Available

Extinguishing Media: Water, CO2, Dry Chemicals

Special Fire Fighting Procedures: None

Unusual Fire and Explosion Hazards: Toner powder, like most organic material

in powder form, is capable of creating a

dust explosion.

#### SECTION 5 - HEALTH HAZARD DATA OF TONER

**EXPOSURE LIMITS:** USA OSHA (TWA\*/PEL):15mg/m3

(Total Dust)

5mg/m3 (Respirable Fraction) ACGIH (TWA/TLV): 10mg/m3

(Total dust) 3mg/m3 DFG (MAK): 6mg/m3 (Feinstaubkonzentrationen)

<sup>\*</sup> The term "TWA" stands for Time Weighted Average.

## **Effects of Overexposure:**

Inhalation: Minimal respiratory tract irritation may

occur as with exposure to large amounts

of any non-toxic dust.

Ingestion: Ingestion is not the applicable route of

entry for ordinary use

Eye Contact: May cause eye irritation

Skin Contact: Overexposure is unlikely to cause skin

irritation

No data available for chronic effects of overexposure.

#### EMERGENCY AND FIRST AID PROCEDURES

Inhalation: Remove person 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

# **TOXICITY DATA: Toner:**

Ingestion: Oral LD50:> 5000mg/kg (rats)

No adverse effect is expected

Inhalation: No Data Available

Eye contact: Not classified as an irritant according to

OSHA Hazard Communication Standard (HCS) and EC Directive 67/548/EEC

based on test data of rabbits.

Skin contact: Not classified as an irritant according to

OSHA Hazard Communication Standard (HCS) and EC Directive 67/548/EEC

based on test data of rabbits

Chronic Toxicity: No Data Available

**Other Toxicity Data** 

MUTAGENICITY: Negative (Test strains: S. <u>typhimurium</u>)
CARCINOGENICITY: No carcinogen or potential carcinogen,

according to IARC MONOGRAPHS\* NTP\*\*, OSHA (USA) regulation and

EC Directive

\* 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

**Incompatibility:** Strong oxidizers

**Hazardous Decomposition Products**: Combustion will produce carbon doxide

and, possible toxic chemicals such as

carbon monoxide.

Hazardous Polymerization: Will not occur

#### SECTION 7 - 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 creafully transfer to a sealable container.

#### WASTE DISPOSAL METHOD:

This product is constructed from plastics and metals. The waste toner could be considered as plastic waste. Disposal may be subject to federal, state or local laws.

#### **SECTION 8 - SPECIAL PROTECTION INFORMATION:**

**Respiratory Protection**: Not required under intended use. **Ventilation:** Good general ventilation should be sufficient under intended use.

sufficient under intended us

**Protective Gloves**: None required **Eye Protection**: None required

**Other Protective Equipment**: None

# **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

## PRECAUTIONS TO BE TAKEN DURING TRANSPORTATION:

#### INTERNATIONAL TRANSPORT INFORMATION:

UK No: None Hazards Class: None Packing Group: None Special Precautions: None

## **SECTION 10 - REGULATORY INFORMATION**

# CHEMICALS REQUIRED TO REPORT UNDER THE SARA TITLE III:

None

# LABEL INFORMATION ACCORDING TO THE DIRECTIVES 88/379/EEC AND 67/548/EEC (EU)

SYMBOL AND INDICATIONS:

R Phrases:

Not required

Not required

Not required

DANGEROUS COMPONENT (CAS No.) wt%

None

OTHER: None

# SPECIFIC REGULATIONS RELATING TO THE PROTECTION OF MAN AND THE ENVIRONMENT (EU):

REGULATION (EEC0 2455/92: Not to be regulated DIRECTIVE: 76/769/EEC: Not to be regulated

OTHER: None

#### SECTION 11- ECOLOGICAL INFORMATION

No data is available as to its effects on the envronment

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