001004

RICOH CORPORATION MATERIAL SAFETY DATA SHEET

Section I. General Information

MSDS Identifier Code

Supplier ID: Ricoh Product Code: 162MIU

Identity: FT 4000 Series Toner

Manufacturer's Name and Address:

Ricoh Corporation

5 Dedrick Place

West Caldwell, NJ 07006

Emergency Telephone Number: (800) 336-6737

Telephone Number for Information: (201) 882-2000, (800) 336-6737

Synonyms & Common Names: 4000 Toner

Uses: FT 3020/50/60, FT 3320, FT 4030/60/65/85, FT 4410/20/30/80/90, FT 4410/4430/4480/4490, FT 5010/50/70, FT 5520/40/60/70/90, FT 6080/85, FT6620, FT 7060, FT 7770

Chemical Formula: Mixture - Carbon black, Styrene Acrylic Resin, Dye

Registry numbers

CAS Number: 0-00-0 RTECS Number: N/A

Date Prepared: 12/27/89 Filed/Prepared By: Kristina Sage

Section II. Hazardous Ingredients/Identity Information

Composition

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Component	8	CAS #	OSHA Pel	ACGIH TLV
Carbon black *Styrene acrylic resin (CAS# Confidential) *Dye (CAS# Confidential)	85.00 0-	333-86-4 -00-0 -00-0	N/A N/A N/A	3.5mg/m3 N/A N/A
Carbon black is listed on the IARC Monograph and the Massachusetts Substance List. None of the other ingredients are listed on the latest NTP Annual Report, IARC Monograph or OSHA Listing as carcinogens. None of the other ingredients are listed on the Massachusetts Substance List. *Non-hazardous THIS PRODUCT IS NON-HAZARDOUS	-			

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Exposure Limits (TLV/PEL)

OSHA: N/A

NIOSH: N/A

ACGIH: See Section II

State: N/A Other: N/A

Section III. Physical/Chemical Characteristics

Boiling Point: N/A

Specific Gravity: 0.34 % Volatile by Volume: N/A

Vapor Pressure: N/A Melting Point: 80C or higher % Volatile by Volume: N/A
Vapor Density (Air=1): N/A

Evaporation Rate (n-BuAc=1): N/A

Solubility in Water: Negligible: Less than 0.1%

Appearance and Odor: Black powder with slight plastic odor

Section IV. Fire and Explosion Hazard Data

Flash Point and Method: N/A

Explosive Limits: LEL N/A UEL N/A

Comments: N/A

Extinguishing Media: CO2, dry chemicals, foam or water

Special Fire-Fighting Procedures: No special fire fighting procedure is

necessary.

Unusual Fire and Explosion Hazards: Will not occur.

Section V. Reactivity Data

Stability: Stable

Conditions to Avoid: N/A

Incompatibility (Materials to Avoid): N/A

Hazardous Decomposition or Byproducts: Carbon monoxide and other decomposition

products in the case of combustion.

Hazardous Polymerization: Will not Occur

Conditions to Avoid: N/A

Section VI. Health and Hazard Data

Routes of Entry: Eyes, ingestion, inhalation

Health Hazards of Short-Term exposure (Acute)

Eyes: May cause temporary eye discomfort

Skin: May cause slight irritation on prolonged and repeated contact with the skin. Mildly irritating (primary irritation index 0.1).

Inhalation: Gasping

Ingestion: Greater than 5g/kg bodyweight, practically non-toxic

Healthh Hazards of Long-Term exposure (Chronic): In a Xerox sponsored chronic inhalation study in rats using a special test toner, there were no lung changes at all in the lowest exposure level (1mg/m3), the most relevant level to potential human exposures. A very slight degree of fibrosis was noted in 25% of the animals at the middle exposure level (4mg/m3) while a slight degree of fibrosis was observed at the highest exposure level (16mg/m3) in all animals. These findings are attributed to "Lung Overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. The special test toner was ten times more respirable than commercially available toner to comply with EPA testing protocol and would not function properly in xerographic equipment.

Carcinogenicity: Carbon black is contained in this toner. The IARC has evaluated the evidence for the carcinogenicity of carbon black as inadequate to determine a carcinogenic risk for humans. Carbon black is not listed on the latest NTP Annual Report or OSHA Listing as a carcinogen.

NTP? No IARC Monographs? No OSHA Regulated? No

Signs and Symptoms of Exposure: N/A

Medical Conditions Generally Aggravated by Exposure: N/A

Emergency and First Aid Procedures

First Aid

Eyes: Try to remove with eye drops or flush with water. If unsuccessful, get medical attention.

Skin: Wash thoroughly with soap and water.

Inhalation: Remove from exposure.

Ingestion: Dilute stomach contents with several glasses of water.

Additional Inforrmation: Ames test result: Negative

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Section VII. Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled: If spilled, sweep up using an approved toner vacuum cleaner with a .5 micron filter such as the Atrix AAA Toner Vacuum (Ricoh EDP Code 342MIU). Use of a vacuum cleaner not rated for toner particulate could be a potential fire hazard and/or result in personal injury. Remove residue with soap and water.

Waste Disposal Method: Used toner should be disposed of in an environmentally safe manner and in accordance with governmental regulations. Do not incinerate. Disposal regulations vary from locality to locality, therefore, consult your local office of the EPA to determine proper method of disposal.

Precautions to Be Taken in Handling and Storing: Cleanse skin thoroughly after contact, before breaks and meals, and at the end of work periods. Keep out of reach of children.

Other Precautions: N/A

Section VIII. Control Measures

Respiratory Protection: None required under normal conditions of use.

Ventilation

. Local Exhaust: None required under normal conditions of use.

Special: None

. Mechanical (general): Adequate ventilation

Other: None

Protective Gloves: None required under normal conditions of use.

Eye Protection: None required under normal conditions of use.

Other Protective Clothing or Equipment: None required under normal conditions of use.

Work and Hygenic Practices: Cleanse skin thoroughly after contact, before brekas and meals and at the end of work periods.