RICOH®

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product Name: Toner Cassette Type 30
Product Number: SM3000
Chemical Name: Mixture
CAS Number: 0-00-0

Company Identification

Ricoh Corporation
5 Dedrick Place
West Caldwell, NJ 07006
(973) 882-2000, (800) 336-6737 (For product information)
(800) 336-6737 (For emergencies)

GENERAL USE:
Ricoh Fax 3000L, Ricoh Fax 3100L, Ricoh Fax 3200L, Ricoh Fax 4500L, Ricoh Fax 2500L, Ricoh Fax 3500L, Ricoh Fax 2600L, Ricoh Fax 5600L, SFX3500M.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Amount	CAS Number
STYRENE ACRYLIC POLYMER	35.0 %	25036-19-5
*POLYOLEFINE	3.0 %	9003-07-0
POLYESTER RESIN (CAS# CONFIDENTIAL)	17.0 %	0-00-0
IRON OXIDE	44.0 %	1317-61-9
DYE	1.0 %	31714-55-3

MISCELLANEOUS:
RTECS Number: N/App.

*Polyolefine is listed on the IARC Monograph. The IARC has evaluated the evidence for the carcinogenicity of Polyolefine as inade quate to determine a carcinogenic risk for humans.

This product contains no known hazardous materials as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200.

EXPOSURE GUIDELINES:
No Information Available.

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3. HAZARDS IDENTIFICATION

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*****************   EMERGENCY OVERVIEW   *****************
*                                                         *
*  THIS PRODUCT IS NON-HAZARDOUS.                         *
*                                                         *
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PRIMARY ENTRY ROUTES:
Skin, ingestion.

ACUTE EYE EFFECTS:
May cause temporary eye discomfort.

ACUTE SKIN EFFECTS:
(rabbit): non-irritant.

ACUTE INHALATION EFFECTS:
Gasping.

ACUTE INGESTION EFFECTS:
Greater than 5g/kg bodyweight, practically non-toxic.

CARCINOGENICITY:
See Section II (Polyolefine).

MEDICAL CONDITION AGGRAVATED BY LONG-TERM EXPOSURE:
None.

CHRONIC EFFECTS:
A Xerox sponsored chronic inhalation study in rats using a special test toner revealed 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.

MISCELLANEOUS:
NTP? No IARC Monographs? Yes OSHA Regulated? No.

Signs and Symptoms of Exposure: None under normal conditions of use.

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4. FIRST AID MEASURES

EYE CONTACT FIRST AID:
Try to remove or flush out with eye drops.

SKIN CONTACT FIRST AID:
Wash thoroughly with soap and water.

INHALATION FIRST AID:
Remove from exposure.

INGESTION FIRST AID:
Dilute stomach contents with several glasses of water.

MISCELLANEOUS:
Ames test results: negative.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES
COC Flash Point: N/A
Autoignition Temperature: N/A

FLAMMABLE LIMITS IN AIR
LEL: N/A
UEL: N/A

FLAMMABILITY CLASSIFICATION:
Not applicable.

EXTINGUISHING MEDIA:
Carbon dioxide, dry chemicals, foam or water spray may be suitable.

UNUSUAL FIRE OR EXPLOSION HAZARDS:
Airborne dispersal of most finely divided organic powders such as toner may form an explosive mixture. Do not incinerate loose or spilled toner.

FIRE FIGHTING INSTRUCTIONS:
Special Fire-Fighting Procedures: Airborne dispersal of most finely divided organic powders such as toner may form an explosive mixture. Do not incinerate loose or spilled toner.

6. ACCIDENTAL RELEASE MEASURES

SPILL / LEAK PROCEDURES:
If spilled, sweep up using an approved toner vacuum cleaner with a .5 micron filter or smaller 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.

7. HANDLING AND STORAGE

STORAGE REQUIREMENTS:
Store in a cool, dry place. Keep out of reach of children.

MISCELLANEOUS:
Cleanse skin thoroughly after contact, before breaks and meals, and at the end of work periods. Do not handle in areas where wind blows. Flying powder may enter eyes. Minimize inhalation of dust.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

VENTILATION:
Local Exhaust Ventilation: None needed under normal conditions of use.

Special Ventilation Requirements: None needed under normal conditions of use.

Mechanical (general): Adequate ventilation.

Other: None.

RESPIRATORY PROTECTION:
None needed under normal conditions of use.

PROTECTIVE CLOTHING / EQUIPMENT:
Protective Gloves: None needed under normal conditions of use.

Eye Protection: None needed under normal conditions of use.

Other Protective Clothing or Equipment: None.

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

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9. PHYSICAL AND CHEMICAL PROPERTIES

FORM	Powder
COLOR	Black
ODOR	slight plastic odor
BOILING POINT	Not applicable C
VAPOR PRESSURE	Not applicable psia
VAPOR DENSITY	Not applicable (Air = 1)
SOLUBILITY IN WATER	Negligible: less than 0.1%
SPECIFIC GRAVITY	1.9 (Water = 1)
MELTING/FREEZING POINT	No data C
% VOLATILES	Not applicable %
EVAPORATION RATE (N-BUAC=1) ...:	Not applicable

10. STABILITY AND REACTIVITY

STABILITY:
Stable.

POLYMERIZATION:
Will not Occur.

CHEMICAL INCOMPATIBILITIES:
None.

CONDITIONS TO AVOID:
None.

HAZARDOUS DECOMPOSITION PRODUCTS:
Carbon monoxide and other decomposition products in the case of incomplete combustion.

11. TOXICOLOGICAL INFORMATION

No information available.

12. ECOLOGICAL INFORMATION

No information available.

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13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

PRODUCT LABEL...: Toner Cassette Type 30

15. REGULATORY INFORMATION

No information available.

16. OTHER INFORMATION

Prepared By.....:	Corporate Quality Assurance/Environmental Administration
Approved By.....:	David Huelbig
Title.....:	Safety Engineer
Approval Date.....:	October 30, 1997
Supercedes Date...:	New
MSDS Number.....:	0502
RTN Number.....:	00000626 (Official Copy)

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END OF MSDS
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