RICOH®

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product Name: Toner Type 204 DTM; Black Product Number: 400316 Chemical Name: mixture CAS Number: 0-00-0

Company Identification

Ricoh Corporation 5 Dedrick Place West Caldwell, NJ 07006 USA 1-973-882-2000 or 1-973-882-5218 (For product information) 1-800-336-6737 (For emergencies)

GENERAL USE:

AP204.

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT LISTING:

Chemical Name	Amount	CAS Number
POLYESTER RESIN	> 79.0 %	41259-36-3
POLYPROPYRENE WAX	0.5 - 5.0 %	9003-07-0
ORGANIC BORON COMPOUND	0.1 - 3.0 %	114803-11-1
CARBON BLACK	3.0 - 10.0 %	1333-86-4
SILICA	< 3.0 %	68909-20-6

EXPOSURE GUIDELINES:

Carbon Black OSHA TWA: 3.5 mg/m^3

ACGIH TWA: 3.5 mg/m^3

3. HAZARDS IDENTIFICATION

ACUTE EYE EFFECTS:

May cause eye irritation.

ACUTE SKIN EFFECTS:

Unlikely to cause skin irritation.

ACUTE INHALATION EFFECTS:

Minimal respiratory tract irritation may occur as with exposure to large amounts of any non-toxic dust.

ACUTE INGESTION EFFECTS:

Ingestion is not applicable route or entry for intended use.

CARCINOGENICITY:

No carcinogen or potential carcinogen, according to IARC Monographs, NTP, OSHA (USA) regulation.

IARC overall evalution is that 'carbon black is possibly carcinogenic to humans (Group 2B)'.

4. FIRST AID MEASURES

EYE CONTACT FIRST AID:

In case of contact, immediately flush with plenty of low pressure water for at least 15 minutes. Call a physician.

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

INHALATION FIRST AID:

Remove to fresh air. Treat any irritation symptomatically. Call a physician.

INGESTION FIRST AID:

If swallowed, do not induce vomiting. Call a physician.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

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

FLAMMABLE LIMITS IN AIR

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LEL: N/A
UEL: N/A
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EXTINGUISHING MEDIA:

CO2, foam, water or dry chemicals.

FIRE FIGHTING INSTRUCTIONS:

None. Keep sources of ignition at a distance.

MISCELLANEOUS:

Toner is combustible. Explosive limits of toner particles suspended in air approximately equal to that of coal dust.

6. ACCIDENTAL RELEASE MEASURES

SPILL / LEAK PROCEDURES:

Loose toner can be removed using an approved vacuum cleaner. Residue can be removed with soap and water.

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS:

Open and handle container with care.

STORAGE REQUIREMENTS:

Store container in a dry/cool place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

VENTILATION:

Good general ventilation should be sufficient under intended use.

RESPIRATORY PROTECTION:

None (under normal use).

PROTECTIVE CLOTHING / EQUIPMENT:

Not necessary.

9. PHYSICAL AND CHEMICAL PROPERTIES

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FORM ....:
                     Fine powder
COLOR .....:
                    Black
                     slight plastic odor
ODOR .....:
                     Not applicable C
BOILING POINT .....
VAPOR PRESSURE .....:
                     Not applicable psia
VAPOR DENSITY .....
                     Not applicable (Air = 1)
SOLUBILITY IN WATER ...:
                     Negligible
SPECIFIC GRAVITY .....:
                     1.1 (Water = 1)
                    Not applicable
PH ....:
% VOLATILES .....
                     Not applicable %
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10. STABILITY AND REACTIVITY

STABILITY:

Stable.

POLYMERIZATION:

Will not occur.

CHEMICAL INCOMPATIBILITIES: Strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS:

Combustion will produce carbon dioxide and, possibly toxic chemicals such as carbon monoxide.

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS:

No data available.

SKIN EFFECTS:

No data available.

ACUTE ORAL EFFECTS:

No data available.

CHRONIC EFFECTS:

No data available.

CARCINOGENICITY:

No carcinogen or potential carcinogen, according to IARC Monographs, NTP, OSHA (USA) regulation.

IARC's overall evaluation is that 'carbon black is possibly carcinogenic to humans (Group 2B)'.

MUTAGENICITY:

Negative (Ames test: Salmonella typhimurium and Escherichia coli).

12. ECOLOGICAL INFORMATION

MISCELLANEOUS:

No data is available as to the effects on the environment.

13. DISPOSAL CONSIDERATIONS

DISPOSAL:

Dispose in an environmentally appropriate manner.

14. TRANSPORT INFORMATION

PRODUCT LABEL ...: Toner Type 204 DTM; Black

15. REGULATORY INFORMATION

No information available.

16. OTHER INFORMATION

PREPARED BY	David Huelbig	
APPROVED BY	David Huelbig	
TITLE:	Safety Engineer	
APPROVAL DATE	April 1, 2003	
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