Material Safety Data Sheet

T8024

THE DOCUMENT COMPANY
FUJI XEROX

Material Safety Data Sheet

MSDS No.: **DV090-00MO** Date Revision : **2003.09.23**

1. PRODUCT AND COMPANY IDENTIFICATION

Manufacturer :Fuji Xerox Co., Ltd
Address :Akasaka Twin Tower East,
17-22, Akasaka-2-choume,
Minato-ku,Tokyo,Japan 107-0052

Contact Point
JAPAN:
Yukio Adachi, Fuji Xerox Co., Ltd
Address: 1600,Takematsu, Minamiashigara-shi
Kanagawa-ken, Japan 250-0111
Telephone Number: +81-465-70-1721/FAX Number: +81-465-70-1792
E-mail: msds-admin@fujixerox.co.jp

ASIA PACIFIC REGION:
Kazuhiko Ando , Fuji Xerox Asia Pacific Pte Ltd
Address: 77 Robinson Road # 26-00
SIA Building Singapore 068896
Telephone Number: 65 6239 2833/FAX Number:65 6239 2714
E-mail: Kazuhiko Ando@fxap.sgp.xerox.com

Product Name:

Color Laser Printer T8024 Developer(Magenta)

2. COMPOSITION, INFORMATION ON INGREDIENTS

Chemical Nature:

Chemical Name	Ingredients (% by wt.)	CAS Registry Number
Mn-Mg-Sr ferrite powder	90-95	—
Polyester	5-10	—
Acrylic resin	< 5	—
Red pigment	< 1	—
Formaldehyde/ meramine copolymer	< 1	—
Carbon black	< 1	1333-86-4

UN Hazard Class : None UN Number : None

3.HAZARDOUS IDENTIFICATION

Physical and Chemical Hazard: None
Adverse Human Health Effects: None
Environmental Effects: None

4.FIRST-AID MEASURES

Eye contact : Flush with a large amount of water for at least 15 minutes. Seek medical advice.
Skin contact : Wash with soap and water.
Inhalation : Remove from exposure and provide fresh air. Rinse mouth with water.
Ingestion : Rinse mouth with water. Give several glasses of water to drink and seek medical advice.

5.FIRE-FIGHTING MEASURES

Specifid method : In case of fire use extinguishing media.
When in a machine, treat as an electrical fire.

Extingishing media : Water spray, Foam, Dry chemicals

6.ACCIDENTAL RELEASE MEASURES

Shut off ignition sources. For small spills, sweep up or soak up with damp cloth.
For large spills, wear proper protective equipment and place waste material in closed container.
Dispose of in accordance with national and local regulations.

7.HANDLING AND STORAGE

Handling : Do not incinerate toner or a toner cartridge. Do not dissemble a cartridge.

Storage : Keep in cool, dry and well-ventilated area. Keep out of reach of children.

8.EXPOSURE CONTROL /PERSONAL PROTECTION

Control Parameter
ACGIH TLV (2003) : 10 mg/m^3 (Total)
3 mg/m^3 (Respirable)

Precautionary Measures : None required when used as intended in Fuji Xerox equipment.
For use other than normal customer operating procedures(such as in bulk toner processing facilities), local exhaust ventilation may be required.

Personal Protective Equipment: None required when used as intended in Fuji Xerox equipment.
For use other than normal customer operating procedures(such as in bulk toner processing facilities), protective glove, goggles and respirators may be required.

9.PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor:	Red Powder / Faint Odor		
Boiling Point(OC):	Not applicable	Vapour Pressure:	Not applicable
Volatile (%):	Not applicable	Softening Point:	Not available
Specific Gravity(H_2O=1):	Not available	Initial Boiling Point:	Not applicable
Solubility in water:	Negligible	Other Data:	None

10.STABILITY AND REACTIVITY

Flash Point(OC) :Not applicable Auto-Ignition Temperature:Not applicable

Explosion Limit :Not applicable

Flammability :Not flammable under conditions of use

Spontaneous Combustibility / Reactivity with water :None

Self-reactivity / Explosive :None

Dust Explosive : Like most organic materials in powder form, it can form explosive mixtures when dispersed in air.

Stability and Reactivity :Stable

Other Data :None

11.TOXICOLOGICAL INFORMATION

Skin Corrosive : None
Skin Irritant (rabbit) : Not an irritant [1] Eye Irritant (rabbit): Not an irritant [1]
Human Patch : No evidence of skin irritation or sensitization. [1]
Sensitization : Skin (guinea-pig) : Not a sensitizer [1]
Acute Toxicity Swallowed→LD50 (rat) : > 5000 mg/kg [1] (practically non-toxic)
Skin→LD50 (rabbit) : > 5000mg/ kg [1] (practically non-toxic)
Inhaled→LC50 (rat) : > 5mg/L/4hr [1] (practically non-toxic)

Chronic Toxicity : The results obtained from a Xerox sponsored, Chronic Toner Inhalation Study, demonstrated no lung change in rats for the lowest (1mg/m3) exposure level (i.e. the level most relevant to potential human exposure). A very slight degree of fibrosis was noted in 25% of the animals at the middle (4mg/m3) exposure level, while a slight degree of fibrosis was noted in all the animals at the highest (16 mg/m3) exposure level. These findings are attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged period. This study was conducted using a special test toner to comply with EPA testing protocol. The test toner was ten times more respirable than commercially available Xerox toner, and would not be functionally suitable for Xerox equipment.[1]

Carcinogenicity : Carbon Black is classified as "Group 2B(possibly carcinogenic to humans) " by IARC. But we obtained the results from a Chronic Toner Inhalation Study, that commercially available Xerox toner has no evidence of human carcinogens. All other ingredients are not classified as "Carcinogens [ref.1]".

Mutagenicity: Ames Assay: Negative [1]

Reproduction and Development: Not classified as " Reproductive and Development chemicals [ref.2]".

1) This information is based on toxicity data for similar materials and ingredients.

12.ECOLOGICAL INFORMATION

Biodegradability : Not available.
Bioaccumulation : Not available.
Acute Toxicity : Not available.
Other Information : None

13.DISPOSAL CONSIDERATION

Dispose of in accordance with national and local regulations.

14.TRANSPORT INFORMATION

Transport in accordance with national, and local regulations.

15.REGULATORY INFORMATION

Ensure this product in compliance with national requirements and ensure conformity to local regulations.

16.OTHER INFORMATION

The above mentioned data correspond to our present state of knowledge and experience, but no warranty is made. Users should consider these data only as a supplement to other information and must make independent determination of the suitability and completeness of information from all sources to ensure proper use and disposal of the materials and safety and health of employees and customers.

References

1: ◆ IARC Monographs on the Evaluation Carcinogenic Risks to Humans (WHO.International Agency for Research on Cancer)
◆ National Toxicology Program(NTP) Report on Carcinogens (NTP)
◆ TLVs and BEIs (American Conference of Governmental Industrial Hygienists)
◆ Council Directive 67/548/EEC on the approximation of the laws, regulations, and administratives provisions relating to the classification, packing and labelling of dangerous substances; Annex 1 (EU)
◆ Journal of Occupational Health(Japan Society for Occupational Heatth)
2: ◆ Council Directive 67/548/EEC on the approximation of the laws, regulations, and administratives provision s relating to the classification, packing and labelling of dangerous substaces; Annex 1 (EU)

THE DOCUMENT COMPANY
FUJI XEROX

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Product Name:

Color Laser Printer T8024 Developer(Cyan)

2. COMPOSITION, INFORMATION ON INGREDIENTS

Chemical Nature:

Chemical Name	Ingredients (% by wt.)	CAS Registry Number
Mn-Mg-Sr ferrite powder	90-95	—
Polyester	5-10	—
Acrylic resin	< 5	—
Blue pigment	< 1	—
Formaldehyde/ meramine copolymer	< 1	—
Carbon black	< 1	1333-86-4

UN Hazard Class : None UN Number : None

3.HAZARDOUS IDENTIFICATION

Physical and Chemical Hazard: None
Adverse Human Health Effects: None
Environmental Effects: None

4.FIRST-AID MEASURES

Eye contact : Flush with a large amount of water for at least 15 minutes. Seek medical advice.
Skin contact : Wash with soap and water.
Inhalation : Remove from exposure and provide fresh air. Rinse mouth with water.
Ingestion : Rinse mouth with water. Give several glasses of water to drink and seek medical advice.

5.FIRE-FIGHTING MEASURES

Specifid method : In case of fire use extinguishing media.
When in a machine, treat as an electrical fire.

Extingishing media : Water spray, Foam, Dry chemicals

6.ACCIDENTAL RELEASE MEASURES

Shut off ignition sources. For small spills, sweep up or soak up with damp cloth.
For large spills, wear proper protective equipment and place waste material in closed container.
Dispose of in accordance with national and local regulations.

7.HANDLING AND STORAGE

Handling : Do not incinerate toner or a toner cartridge. Do not dissemble a cartridge.

Storage : Keep in cool, dry and well-ventilated area. Keep out of reach of children.

8.EXPOSURE CONTROL /PERSONAL PROTECTION

Control Parameter
ACGIH TLV (2003) : 10 mg/m^3 (Total)
3 mg/m^3 (Respirable)

Precautionary Measures : None required when used as intended in Fuji Xerox equipment.
For use other than normal customer operating procedures(such as in bulk toner processing facilities), local exhaust ventilation may be required.

Personal Protective Equipment: None required when used as intended in Fuji Xerox equipment.
For use other than normal customer operating procedures(such as in bulk toner processing facilities), protective glove, goggles and respirators may be required.

9.PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor:	Blue Powder / Faint Odor		
Boiling Point(OC):	Not applicable	Vapour Pressure:	Not applicable
Volatile (%):	Not applicable	Softening Point:	Not available
Specific Gravity(H_2O=1):	Not available	Initial Boiling Point:	Not applicable
Solubility in water:	Negligible	Other Data:	None

10.STABILITY AND REACTIVITY

Flash Point(OC) :Not applicable Auto-Ignition Temperature:Not applicable

Explosion Limit :Not applicable

Flammability :Not flammable under conditions of use

Spontaneous Combustibility / Reactivity with water :None

Self-reactivity / Explosive :None

Dust Explosive : Like most organic materials in powder form, it can form explosive mixtures when dispersed in air.

Stability and Reactivity :Stable

Other Data :None

11.TOXICOLOGICAL INFORMATION

Skin Corrosive : None
Skin Irritant (rabbit) : Not an irritant [1] Eye Irritant (rabbit): Not an irritant [1]
Human Patch : No evidence of skin irritation or sensitization. [1]
Sensitization : Skin (guinea-pig) : Not a sensitizer [1]
Acute Toxicity Swallowed→LD50 (rat) : > 5000 mg/kg [1] (practically non-toxic)
Skin→LD50 (rabbit) : > 5000mg/ kg [1] (practically non-toxic)
Inhaled→LC50 (rat) : > 5mg/L/4hr [1] (practically non-toxic)

Chronic Toxicity : The results obtained from a Xerox sponsored, Chronic Toner Inhalation Study, demonstrated no lung change in rats for the lowest (1mg/m3) exposure level (i.e. the level most relevant to potential human exposure). A very slight degree of fibrosis was noted in 25% of the animals at the middle (4mg/m3) exposure level, while a slight degree of fibrosis was noted in all the animals at the highest (16 mg/m3) exposure level. These findings are attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged period. This study was conducted using a special test toner to comply with EPA testing protocol. The test toner was ten times more respirable than commercially available Xerox toner, and would not be functionally suitable for Xerox equipment.[1]

Carcinogenicity : Carbon Black is classified as "Group 2B(possibly carcinogenic to humans) " by IARC. But we obtained the results from a Chronic Toner Inhalation Study, that commercially available Xerox toner has no evidence of human carcinogens. All other ingredients are not classified as "Carcinogens [ref.1]".

Mutagenicity: Ames Assay: Negative [1]

Reproduction and Development: Not classified as " Reproductive and Development chemicals [ref.2]".

1) This information is based on toxicity data for similar materials and ingredients.

12.ECOLOGICAL INFORMATION

Biodegradability : Not available.
Bioaccumulation : Not available.
Acute Toxicity : Not available.
Other Information : None

13.DISPOSAL CONSIDERATION

Dispose of in accordance with national and local regulations.

14.TRANSPORT INFORMATION

Transport in accordance with national, and local regulations.

15.REGULATORY INFORMATION

Ensure this product in compliance with national requirements and ensure conformity to local regulations.

16.OTHER INFORMATION

The above mentioned data correspond to our present state of knowledge and experience, but no warranty is made. Users should consider these data only as a supplement to other information and must make independent determination of the suitability and completeness of information from all sources to ensure proper use and disposal of the materials and safety and health of employees and customers.

References

1: ◆ IARC Monographs on the Evaluation Carcinogenic Risks to Humans (WHO.International Agency for Research on Cancer)
◆ National Toxicology Program(NTP) Report on Carcinogens (NTP)
◆ TLVs and BEIs (American Conference of Governmental Industrial Hygienists)
◆ Council Directive 67/548/EEC on the approximation of the laws, regulations, and administratives provisions relating to the classification, packing and labelling of dangerous substances; Annex 1 (EU)
◆ Journal of Occupational Health(Japan Society for Occupational Heatth)
2: ◆ Council Directive 67/548/EEC on the approximation of the laws, regulations, and administratives provision s relating to the classification, packing and labelling of dangerous substaces; Annex 1 (EU)

THE DOCUMENT COMPANY
FUJI XEROX

Material Safety Data Sheet

MSDS No.: **TN131-00MO** | Date | Revision : **2003.09.23**

1. PRODUCT AND COMPANY IDENTIFICATION

Manufacturer :Fuji Xerox Co., Ltd
Address :Akasaka Twin Tower East,
17-22, Akasaka-2-choume,
Minato-ku,Tokyo,Japan 107-0052

Contact Point
JAPAN:
Yukio Adachi, Fuji Xerox Co., Ltd
Address: 1600,Takematsu, Minamiashigara-shi
Kanagawa-ken, Japan 250-0111
Telephone Number: +81-465-70-1721/FAX Number: +81-465-70-1792
E-mail: msds-admin@fujixerox.co.jp

ASIA PACIFIC REGION:
Kazuhiko Ando , Fuji Xerox Asia Pacific Pte Ltd
Address: 77 Robinson Road # 26-00
SIA Building Singapore 068896
Telephone Number: 65 6239 2833/FAX Number:65 6239 2714
E-mail: Kazuhiko Ando@fxap.sgp.xerox.com

Product Name:

Color Laser Printer T8024 Toner(Cyan)

2. COMPOSITION, INFORMATION ON INGREDIENTS

Chemical Nature:

Chemical Name	Ingredients (% by wt.)	CAS Registry Number
Polyester	80-90	—
Blue pigment	< 5	—
Paraffin waxes	< 5	—
Vegetable wax	< 5	—
Amorphous silica	< 5	—

UN Hazard Class : None UN Number : None

3.HAZARDOUS IDENTIFICATION

Physical and Chemical Hazard: None
Adverse Human Health Effects: None
Environmental Effects: None

4.FIRST-AID MEASURES

Eye contact : Flush with a large amount of water for at least 15 minutes. Seek medical advice.
Skin contact : Wash with soap and water.
Inhalation : Remove from exposure and provide fresh air. Rinse mouth with water.
Ingestion : Rinse mouth with water. Give several glasses of water to drink and seek medical advice.

5.FIRE-FIGHTING MEASURES

Specifid method : In case of fire use extinguishing media.
When in a machine, treat as an electrical fire.

Extingishing media : Water spray, Foam, Dry chemicals

6.ACCIDENTAL RELEASE MEASURES

Shut off ignition sources. For small spills, sweep up or soak up with damp cloth.
For large spills, wear proper protective equipment and place waste material in closed container.
Dispose of in accordance with national and local regulations.

7.HANDLING AND STORAGE

Handling : Do not incinerate toner or a toner cartridge. Do not dissemble a cartridge.

Storage : Keep in cool, dry and well-ventilated area. Keep out of reach of children.

8.EXPOSURE CONTROL /PERSONAL PROTECTION

Control Parameter
ACGIH TLV (2003) : 10 mg/m^3 (Total)
3 mg/m^3 (Respirable)

Precautionary Measures : None required when used as intended in Fuji Xerox equipment.
For use other than normal customer operating procedures(such as in bulk toner processing facilities), local exhaust ventilation may be required.

Personal Protective Equipment: None required when used as intended in Fuji Xerox equipment.
For use other than normal customer operating procedures(such as in bulk toner processing facilities), protective glove, goggles and respirators may be required.

9.PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor:	Blue Powder / Faint Odor		
Boiling Point(OC):	Not applicable	Vapour Pressure:	Not applicable
Volatile (%):	Not applicable	Softening Point:	Not available
Specific Gravity(H_2O=1):	Not available	Initial Boiling Point:	Not applicable
Solubility in water:	Negligible	Other Data:	None

10.STABILITY AND REACTIVITY

Flash Point(OC) :Not applicable Auto-Ignition Temperature:Not applicable

Explosion Limit :Not applicable

Flammability :Not flammable under conditions of use

Spontaneous Combustibility / Reactivity with water :None

Self-reactivity / Explosive :None

Dust Explosive : Like most organic materials in powder form, it can form explosive mixtures when dispersed in air.

Stability and Reactivity :Stable

Other Data :None

11.TOXICOLOGICAL INFORMATION

Skin Corrosive	: None		
Skin Irritant (rabbit)	: Not an irritant	Eye Irritant (rabbit): Not an irritant	
Human Patch	: Not available		
Sensitization	: Skin (guinea-pig)	: Not a sensitizer	
Acute Toxicity	Swallowed→LD50 (rat)	: > 5000 mg/kg[1)]	(practically non-toxic)
	Skin→LD50 (rabbit)	: > 5000 mg/kg[1)]	(practically non-toxic)
	Inhaled→LC50 (rat)	: > 5 mg/L/4hr[1)]	(practically non-toxic)

Chronic Toxicity : The results obtained from a Xerox sponsored, Chronic Toner Inhalation Study, demonstrated no lung change in rats for the lowest (1mg/m3) exposure level (i.e. the level most relevant to potential human exposure). A very slight degree of fibrosis was noted in 25% of the animals at the middle (4mg/m3) exposure level, while a slight degree of fibrosis was noted in all the animals at the highest (16 mg/m3) exposure level. These findings are attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged period. This study was conducted using a special test toner to comply with EPA testing protocol. The test toner was ten times more respirable than commercially available Xerox toner, and would not be functionally suitable for Xerox equipment.[1)]

Carcinogenicity : Not classified as "Carcinogens [ref.1]".

Mutagenicity: Ames Assay: Negative

Reproduction and Development: Not classified as " Reproductive and Development chemicals [ref.2]".

1) This information is based on toxicity data for similar materials and ingredients.

12. ECOLOGICAL INFORMATION

Biodegradability	: Not available.
Bioaccumulation	: Not available.
Acute Toxicity	: Not available.
Other Information	: None

13.DISPOSAL CONSIDERATION

Dispose of in accordance with national and local regulations.

14.TRANSPORT INFORMATION

Transport in accordance with national, and local regulations.

15.REGULATORY INFORMATION

Ensure this product in compliance with national requirements and ensure conformity to local regulations.

16.OTHER INFORMATION

The above mentioned data correspond to our present state of knowledge and experience, but no warranty is made. Users should consider these data only as a supplement to other information and must make independent determination of the suitability and completeness of information from all sources to ensure proper use and disposal of the materials and safety and health of employees and customers.

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THE DOCUMENT COMPANY
FUJI XEROX

Material Safety Data Sheet

MSDS No.: **TN130-00MO** | Date | Revision : **2003.09.23**

1. PRODUCT AND COMPANY IDENTIFICATION

Manufacturer :Fuji Xerox Co., Ltd
Address :Akasaka Twin Tower East,
17-22, Akasaka-2-choume,
Minato-ku,Tokyo,Japan 107-0052

Contact Point
JAPAN:
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Product Name:

Color Laser Printer T8024 Toner(Magenta)

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Chemical Nature:

Chemical Name	Ingredients (% by wt.)	CAS Registry Number
Polyester	80-90	—
Red pigment	5-10	—
Paraffin waxes	< 5	—
Vegetable wax	< 5	—
Amorphous silica	< 5	—

UN Hazard Class : None UN Number : None

3.HAZARDOUS IDENTIFICATION

Physical and Chemical Hazard: None
Adverse Human Health Effects: None
Environmental Effects: None

4.FIRST-AID MEASURES

Eye contact : Flush with a large amount of water for at least 15 minutes. Seek medical advice.
Skin contact : Wash with soap and water.
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For large spills, wear proper protective equipment and place waste material in closed container.
Dispose of in accordance with national and local regulations.

7.HANDLING AND STORAGE

Handling : Do not incinerate toner or a toner cartridge. Do not dissemble a cartridge.

Storage : Keep in cool, dry and well-ventilated area. Keep out of reach of children.

8.EXPOSURE CONTROL /PERSONAL PROTECTION

Control Parameter
ACGIH TLV (2003) : 10 mg/m^3 (Total)
3 mg/m^3 (Respirable)

Precautionary Measures : None required when used as intended in Fuji Xerox equipment.
For use other than normal customer operating procedures(such as in bulk toner processing facilities), local exhaust ventilation may be required.

Personal Protective Equipment: None required when used as intended in Fuji Xerox equipment.
For use other than normal customer operating procedures(such as in bulk toner processing facilities), protective glove, goggles and respirators may be required.

9.PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor:	Red Powder / Faint Odor		
Boiling Point(OC):	Not applicable	Vapour Pressure:	Not applicable
Volatile (%):	Not applicable	Softening Point:	Not available
Specific Gravity(H_2O=1):	Not available	Initial Boiling Point:	Not applicable
Solubility in water:	Negligible	Other Data:	None

10.STABILITY AND REACTIVITY

Flash Point(OC) :Not applicable Auto-Ignition Temperature:Not applicable

Explosion Limit :Not applicable

Flammability :Not flammable under conditions of use

Spontaneous Combustibility / Reactivity with water :None

Self-reactivity / Explosive :None

Dust Explosive : Like most organic materials in powder form, it can form explosive mixtures when dispersed in air.

Stability and Reactivity :Stable

Other Data :None

11.TOXICOLOGICAL INFORMATION

Skin Corrosive	: None		
Skin Irritant (rabbit)	: Not an irritant	Eye Irritant (rabbit): Not an irritant	
Human Patch	: Not available		
Sensitization	: Skin (guinea-pig)	: Not a sensitizer	
Acute Toxicity	Swallowed→LD50 (rat)	: > 5000 mg/kg[1)]	(practically non-toxic)
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Carcinogenicity : Not classified as "Carcinogens [ref.1]".

Mutagenicity: Ames Assay: Negative

Reproduction and Development: Not classified as " Reproductive and Development chemicals [ref.2]".

1) This information is based on toxicity data for similar materials and ingredients.

12.ECOLOGICAL INFORMATION

Biodegradability : Not available.
Bioaccumulation : Not available.
Acute Toxicity : Not available.
Other Information : None

13.DISPOSAL CONSIDERATION

Dispose of in accordance with national and local regulations.

14.TRANSPORT INFORMATION

Transport in accordance with national, and local regulations.

15.REGULATORY INFORMATION

Ensure this product in compliance with national requirements and ensure conformity to local regulations.

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THE DOCUMENT COMPANY
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Material Safety Data Sheet

MSDS No.: **PR037-00MK** | Date | Revision : **2003.09.23**

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Telephone Number: +81-465-70-1721/FAX Number: +81-465-70-1792
E-mail: msds-admin@fujixerox.co.jp

ASIA PACIFIC REGION:
Kazuhiko Ando , Fuji Xerox Asia Pacific Pte Ltd
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SIA Building Singapore 068896
Telephone Number: 65 6239 2833/FAX Number:65 6239 2714
E-mail: Kazuhiko Ando@fxap.sgp.xerox.com

Product Name:

Color Laser Printer T8024 Photoreceptor

2. COMPOSITION, INFORMATION ON INGREDIENTS

Chemical Nature: This product is classified as an "Article".

Chemical Name	Ingredients (% by wt.)	CAS Registry Number
Organic materials	—	—

The specific chemical identities are trade secrets.

UN Hazard Class : None UN Number : None

3.HAZARDOUS IDENTIFICATION

Physical and Chemical Hazard: There are no significant hazards associated with this product.
Adverse Human Health Effects: There are no significant hazards associated with this product.
Environmental Effects: There are no significant hazards associated with this product.

4.FIRST-AID MEASURES

Eye contact : Not applicable.
Skin contact : Wash with soap and water.
Inhalation : Not applicable.
Ingestion : Not applicable.

5.FIRE-FIGHTING MEASURES

Specifid method : In case of fire use extinguishing media.
When in a machine, treat as an electrical fire.

Extingishing media : Water spray, Foam, Dry chemicals, CO_2

6.ACCIDENTAL RELEASE MEASURES

None required when used as intended in Fuji Xerox equipment.

7.HANDLING AND STORAGE

Handling : Avoid exposure to high temperature. Do not dissemble a cartridge.

Storage : Keep in cool, dry and well-ventilated area. Keep out of reach of children.

8.EXPOSURE CONTROL /PERSONAL PROTECTION

Control Parameter
ACGIH TLV (2003) : Not applicable

Precautionary Measures : None required when used as intended in Fuji Xerox equipment.

Personal Protective Equipment: None required when used as intended in Fuji Xerox equipment.
For use other than normal customer operating procedures, protective glove may be required.

9.PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor:	Green solid/ Odorless		
Boiling Point(OC):	Not applicable	Vapour Pressure:	Not applicable
Volatile (%):	Not applicable	Softening Point:	Not available
Specific Gravity(H2O=1):	Not available	Initial Boiling Point:	Not applicable
Solubility in water:	Insoluble	Other Data:	None

10.STABILITY AND REACTIVITY

Flash Point(OC) :None Auto-Ignition Temperature: None

Explosion Limit :Not applicable

Flammability :Not flammable under conditions of use

Spontaneous Combustibility / Reactivity with water :None

Self-reactivity/Explosive:None

Dust Explosive :Not applicable

Stability and Reactivity :Stable

Other Data :None

11.TOXICOLOGICAL INFORMATION

Skin Corrosive	: None		
Skin Irritant (rabbit)	: Not an irritant.	Eye Irritant (rabbit): Slight irritant	
Human Patch	: Not available		
Sensitization	: Skin (guinea-pig)	: Not available	
Acute Toxicity	Swallowed→LD50 (rat)	: > 2.0 g/kg	(practically non-toxic)
	Skin→LD50 (rabbit)	: Not available	
	Inhaled→LC50 (rat)	: Not available	

Chronic Toxicity : Not known.
Carcinogenicity : Not contain/classified as "Carcinogens [ref.1]".
Mutagenicity: Ames Assay: Negative
Reproduction and Development: Not classified as " Reproductive and Development chemicals [ref.2]".

12.ECOLOGICAL INFORMATION

Biodegradability : Not available.
Bioaccumulation : Not available.
Acute Toxicity : Not available.
Other Information : None

13.DISPOSAL CONSIDERATION

Dispose of in accordance with national and local regurations.

14.TRANSPORT INFORMATION

Transport in accordance with national, and local regulations.

15.REGULATORY INFORMATION

Ensure this product in compliance with national requirements and ensure conformity to local regulations.

16.OTHER INFORMATION

The above mentioned data correspond to our present state of knowledge and experience, but no warranty is made. Users should consider these data only as a supplement to other information and must make independent determination of the suitability and completeness of information from all sources to ensure proper use and disposal of the materials and safety and health of employees and customers.

References

1:
- IARC Monographs on the Evaluation Carcinogenic Risks to Humans (WHO.International Agency for Research on Cancer)
- National Toxicology Program(NTP) Report on Carcinogens (NTP)
- TLVs and BEIs (American Conference of Governmental Industrial Hygienists)
- Council Directive 67/548/EEC on the approximation of the laws, regulations, and administratives provisions relating to the classification, packing and labelling of dangerous substances; Annex 1 (EU)
- Journal of Occupational Health(Japan Society for Occupational Heatth)

2:
- Council Directive 67/548/EEC on the approximation of the laws, regulations, and administratives provision s relating to the classification, packing and labelling of dangerous substaces; Annex 1 (EU)

THE DOCUMENT COMPANY
FUJI XEROX

Material Safety Data Sheet

MSDS No.: **TN129-00MO** Date Revision : **2003.09.23**

1. PRODUCT AND COMPANY IDENTIFICATION

Manufacturer :Fuji Xerox Co., Ltd
Address :Akasaka Twin Tower East,
17-22, Akasaka-2-choume,
Minato-ku,Tokyo,Japan 107-0052

Contact Point
JAPAN:
Yukio Adachi, Fuji Xerox Co., Ltd
Address: 1600,Takematsu, Minamiashigara-shi
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ASIA PACIFIC REGION:
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SIA Building Singapore 068896
Telephone Number: 65 6239 2833/FAX Number:65 6239 2714
E-mail: Kazuhiko Ando@fxap.sgp.xerox.com

Product Name:

Color Laser Printer T8024 Toner(Yellow)

2. COMPOSITION, INFORMATION ON INGREDIENTS

Chemical Nature:

Chemical Name	Ingredients (% by wt.)	CAS Registry Number
Polyester	70-80	—
Yellow pigment	5-10	—
Vegetable wax	5-10	—
Paraffin waxes	< 5	—
Amorphous silica	< 5	—

UN Hazard Class : None UN Number : None

3.HAZARDOUS IDENTIFICATION

Physical and Chemical Hazard: None
Adverse Human Health Effects: None
Environmental Effects: None

4.FIRST-AID MEASURES

Eye contact : Flush with a large amount of water for at least 15 minutes. Seek medical advice.
Skin contact : Wash with soap and water.
Inhalation : Remove from exposure and provide fresh air. Rinse mouth with water.
Ingestion : Rinse mouth with water. Give several glasses of water to drink and seek medical advice.

5.FIRE-FIGHTING MEASURES

Specifid method : In case of fire use extinguishing media.
When in a machine, treat as an electrical fire.

Extingishing media : Water spray, Foam, Dry chemicals

6.ACCIDENTAL RELEASE MEASURES

Shut off ignition sources. For small spills, sweep up or soak up with damp cloth.
For large spills, wear proper protective equipment and place waste material in closed container.
Dispose of in accordance with national and local regulations.

7.HANDLING AND STORAGE

Handling : Do not incinerate toner or a toner cartridge. Do not dissemble a cartridge.

Storage : Keep in cool, dry and well-ventilated area. Keep out of reach of children.

8.EXPOSURE CONTROL /PERSONAL PROTECTION

Control Parameter
ACGIH TLV (2003) : 10 mg/m^3 (Total)
3 mg/m^3 (Respirable)

Precautionary Measures : None required when used as intended in Fuji Xerox equipment.
For use other than normal customer operating procedures(such as in bulk toner processing facilities), local exhaust ventilation may be required.

Personal Protective Equipment: None required when used as intended in Fuji Xerox equipment.
For use other than normal customer operating procedures(such as in bulk toner processing facilities), protective glove, goggles and respirators may be required.

9.PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor:	Yellow Powder / Faint Odor		
Boiling Point(OC):	Not applicable	Vapour Pressure:	Not applicable
Volatile (%):	Not applicable	Softening Point:	Not available
Specific Gravity(H_2O=1):	Not available	Initial Boiling Point:	Not applicable
Solubility in water:	Negligible	Other Data:	None

10.STABILITY AND REACTIVITY

Flash Point(OC) :Not applicable Auto-Ignition Temperature:Not applicable

Explosion Limit :Not applicable

Flammability :Not flammable under conditions of use

Spontaneous Combustibility / Reactivity with water :None

Self-reactivity / Explosive :None

Dust Explosive : Like most organic materials in powder form, it can form explosive mixtures when dispersed in air.

Stability and Reactivity :Stable

Other Data :None

11.TOXICOLOGICAL INFORMATION

Skin Corrosive : None
Skin Irritant (rabbit) : Not an irritant Eye Irritant (rabbit): Not an irritant
Human Patch : Not available
Sensitization : Skin (guinea-pig) : Not a sensitizer
Acute Toxicity Swallowed→LD50 (rat) : > 5000 mg/kg[1)] (practically non-toxic)
Skin→LD50 (rabbit) : > 5000 mg/kg[1)] (practically non-toxic)
Inhaled→LC50 (rat) : > 5 mg/L/4hr[1)] (practically non-toxic)

Chronic Toxicity : The results obtained from a Xerox sponsored, Chronic Toner Inhalation Study, demonstrated no lung change in rats for the lowest (1mg/m3) exposure level (i.e. the level most relevant to potential human exposure). A very slight degree of fibrosis was noted in 25% of the animals at the middle (4mg/m3) exposure level, while a slight degree of fibrosis was noted in all the animals at the highest (16 mg/m3) exposure level. These findings are attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged period. This study was conducted using a special test toner to comply with EPA testing protocol. The test toner was ten times more respirable than commercially available Xerox toner, and would not be functionally suitable for Xerox equipment.[1)]

Carcinogenicity : Not classified as "Carcinogens [ref.1]".

Mutagenicity: Ames Assay: Negative

Reproduction and Development: Not classified as " Reproductive and Development chemicals [ref.2]".

1) This information is based on toxicity data for similar materials and ingredients.

12.ECOLOGICAL INFORMATION

Biodegradability : Not available.
Bioaccumulation : Not available.
Acute Toxicity : Not available.
Other Information : None

13.DISPOSAL CONSIDERATION

Dispose of in accordance with national and local regulations.

14.TRANSPORT INFORMATION

Transport in accordance with national, and local regulations.

15.REGULATORY INFORMATION

Ensure this product in compliance with national requirements and ensure conformity to local regulations.

16.OTHER INFORMATION

The above mentioned data correspond to our present state of knowledge and experience, but no warranty is made. Users should consider these data only as a supplement to other information and must make independent determination of the suitability and completeness of information from all sources to ensure proper use and disposal of the materials and safety and health of employees and customers.

References

1:
- IARC Monographs on the Evaluation Carcinogenic Risks to Humans (WHO.International Agency for Research on Cancer)
- National Toxicology Program(NTP) Report on Carcinogens (NTP)
- TLVs and BEIs (American Conference of Governmental Industrial Hygienists)
- Council Directive 67/548/EEC on the approximation of the laws, regulations, and administratives provisions relating to the classification, packing and labelling of dangerous substances; Annex 1 (EU)
- Journal of Occupational Health(Japan Society for Occupational Heatth)

2:
- Council Directive 67/548/EEC on the approximation of the laws, regulations, and administratives provision s relating to the classification, packing and labelling of dangerous substaces; Annex 1 (EU)

THE DOCUMENT COMPANY
FUJI XEROX

Material Safety Data Sheet

MSDS No.: **DV089-00MO** Date Revision : **2003.09.23**

1. PRODUCT AND COMPANY IDENTIFICATION

Manufacturer :Fuji Xerox Co., Ltd
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Contact Point
JAPAN:
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Address: 1600,Takematsu, Minamiashigara-shi
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E-mail: msds-admin@fujixerox.co.jp

ASIA PACIFIC REGION:
Kazuhiko Ando , Fuji Xerox Asia Pacific Pte Ltd
Address: 77 Robinson Road # 26-00
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Telephone Number: 65 6239 2833/FAX Number:65 6239 2714
E-mail: Kazuhiko Ando@fxap.sgp.xerox.com

Product Name:

Color Laser Printer T8024 Developer(Yellow)

2. COMPOSITION, INFORMATION ON INGREDIENTS

Chemical Nature:

Chemical Name	Ingredients (% by wt.)	CAS Registry Number
Mn-Mg-Sr ferrite powder	90-95	—
Polyester	5-10	—
Acrylic resin	< 5	—
Yellow pigment	< 1	—
Formaldehyde/ meramine copolymer	< 1	—
Carbon black	< 1	1333-86-4

UN Hazard Class : None UN Number : None

3.HAZARDOUS IDENTIFICATION

Physical and Chemical Hazard: None
Adverse Human Health Effects: None
Environmental Effects: None

4.FIRST-AID MEASURES

Eye contact : Flush with a large amount of water for at least 15 minutes. Seek medical advice.
Skin contact : Wash with soap and water.
Inhalation : Remove from exposure and provide fresh air. Rinse mouth with water.
Ingestion : Rinse mouth with water. Give several glasses of water to drink and seek medical advice.

5.FIRE-FIGHTING MEASURES

Specifid method	:	In case of fire use extinguishing media. When in a machine, treat as an electrical fire.
Extingishing media	:	Water spray, Foam, Dry chemicals

6.ACCIDENTAL RELEASE MEASURES

Shut off ignition sources. For small spills, sweep up or soak up with damp cloth.
For large spills, wear proper protective equipment and place waste material in closed container.
Dispose of in accordance with national and local regulations.

7.HANDLING AND STORAGE

Handling	:	Do not incinerate toner or a toner cartridge. Do not dissemble a cartridge.
Storage	:	Keep in cool, dry and well-ventilated area. Keep out of reach of children.

8.EXPOSURE CONTROL /PERSONAL PROTECTION

Control Parameter ACGIH TLV (2003)	:	10 mg/m^3 (Total) 3 mg/m^3 (Respirable)
Precautionary Measures	:	None required when used as intended in Fuji Xerox equipment. For use other than normal customer operating procedures(such as in bulk toner processing facilities), local exhaust ventilation may be required.
Personal Protective Equipment:		None required when used as intended in Fuji Xerox equipment. For use other than normal customer operating procedures(such as in bulk toner processing facilities), protective glove, goggles and respirators may be required.

9.PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor:	Yellow Powder / Faint Odor		
Boiling Point(OC):	Not applicable	Vapour Pressure:	Not applicable
Volatile (%):	Not applicable	Softening Point:	Not available
Specific Gravity(H_2O=1):	Not available	Initial Boiling Point:	Not applicable
Solubility in water:	Negligible	Other Data:	None

10.STABILITY AND REACTIVITY

Flash Point(OC)	:Not applicable	Auto-Ignition Temperature:Not applicable
Explosion Limit	:Not applicable	
Flammability	:Not flammable under conditions of use	
Spontaneous Combustibility / Reactivity with water		:None
Self-reactivity / Explosive		:None
Dust Explosive	: Like most organic materials in powder form, it can form explosive mixtures when dispersed in air.	
Stability and Reactivity	:Stable	
Other Data	:None	

11.TOXICOLOGICAL INFORMATION

Skin Corrosive : None
Skin Irritant (rabbit) : Not an irritant [1] Eye Irritant (rabbit): Not an irritant [1]
Human Patch : No evidence of skin irritation or sensitization. [1]
Sensitization : Skin (guinea-pig) : Not a sensitizer [1]
Acute Toxicity Swallowed→LD50 (rat) : > 5000 mg/kg [1] (practically non-toxic)
Skin→LD50 (rabbit) : > 5000mg/ kg [1] (practically non-toxic)
Inhaled→LC50 (rat) : > 5mg/L/4hr [1] (practically non-toxic)

Chronic Toxicity : The results obtained from a Xerox sponsored, Chronic Toner Inhalation Study, demonstrated no lung change in rats for the lowest (1mg/m3) exposure level (i.e. the level most relevant to potential human exposure). A very slight degree of fibrosis was noted in 25% of the animals at the middle (4mg/m3) exposure level, while a slight degree of fibrosis was noted in all the animals at the highest (16 mg/m3) exposure level. These findings are attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged period. This study was conducted using a special test toner to comply with EPA testing protocol. The test toner was ten times more respirable than commercially available Xerox toner, and would not be functionally suitable for Xerox equipment.[1]

Carcinogenicity : Carbon Black is classified as "Group 2B(possibly carcinogenic to humans) " by IARC. But we obtained the results from a Chronic Toner Inhalation Study, that commercially available Xerox toner has no evidence of human carcinogens. All other ingredients are not classified as "Carcinogens [ref.1]".

Mutagenicity: Ames Assay: Negative [1]

Reproduction and Development: Not classified as " Reproductive and Development chemicals [ref.2]".

1) This information is based on toxicity data for similar materials and ingredients.

12.ECOLOGICAL INFORMATION

Biodegradability : Not available.
Bioaccumulation : Not available.
Acute Toxicity : Not available.
Other Information : None

13.DISPOSAL CONSIDERATION

Dispose of in accordance with national and local regulations.

14.TRANSPORT INFORMATION

Transport in accordance with national, and local regulations.

15.REGULATORY INFORMATION

Ensure this product in compliance with national requirements and ensure conformity to local regulations.

16.OTHER INFORMATION

The above mentioned data correspond to our present state of knowledge and experience, but no warranty is made. Users should consider these data only as a supplement to other information and must make independent determination of the suitability and completeness of information from all sources to ensure proper use and disposal of the materials and safety and health of employees and customers.

References

1: ◆ IARC Monographs on the Evaluation Carcinogenic Risks to Humans (WHO.International Agency for Research on Cancer)
◆ National Toxicology Program(NTP) Report on Carcinogens (NTP)
◆ TLVs and BEIs (American Conference of Governmental Industrial Hygienists)
◆ Council Directive 67/548/EEC on the approximation of the laws, regulations, and administratives provisions relating to the classification, packing and labelling of dangerous substances; Annex 1 (EU)
◆ Journal of Occupational Health(Japan Society for Occupational Heatth)
2: ◆ Council Directive 67/548/EEC on the approximation of the laws, regulations, and administratives provision s relating to the classification, packing and labelling of dangerous substaces; Annex 1 (EU)

THE DOCUMENT COMPANY
FUJI XEROX

Material Safety Data Sheet

MSDS No.: **DV088-00MO** | Date | Revision : **2003.09.23**

1. PRODUCT AND COMPANY IDENTIFICATION

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Minato-ku,Tokyo,Japan 107-0052

Contact Point
JAPAN:
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Address: 1600,Takematsu, Minamiashigara-shi
Kanagawa-ken, Japan 250-0111
Telephone Number: +81-465-70-1721/FAX Number: +81-465-70-1792
E-mail: msds-admin@fujixerox.co.jp

ASIA PACIFIC REGION:
Kazuhiko Ando , Fuji Xerox Asia Pacific Pte Ltd
Address: 77 Robinson Road # 26-00
SIA Building Singapore 068896
Telephone Number: 65 6239 2833/FAX Number:65 6239 2714
E-mail: Kazuhiko Ando@fxap.sgp.xerox.com

Product Name:

Color Laser Printer T8024 Developer(Black)

2. COMPOSITION, INFORMATION ON INGREDIENTS

Chemical Nature:

Chemical Name	Ingredients (% by wt.)	CAS Registry Number
Mn-Mg-Sr ferrite powder	90-95	—
Polyester	5-10	—
Acrylic resin	< 5	—
Formaldehyde/ meramine copolymer	< 1	—
Carbon black	< 1	1333-86-4

UN Hazard Class : None UN Number : None

3.HAZARDOUS IDENTIFICATION

Physical and Chemical Hazard: None
Adverse Human Health Effects: None
Environmental Effects: None

4.FIRST-AID MEASURES

Eye contact : Flush with a large amount of water for at least 15 minutes. Seek medical advice.
Skin contact : Wash with soap and water.
Inhalation : Remove from exposure and provide fresh air. Rinse mouth with water.
Ingestion : Rinse mouth with water. Give several glasses of water to drink and seek medical advice.

5.FIRE-FIGHTING MEASURES

Specifid method : In case of fire use extinguishing media.
When in a machine, treat as an electrical fire.

Extingishing media : Water spray, Foam, Dry chemicals

6.ACCIDENTAL RELEASE MEASURES

Shut off ignition sources. For small spills, sweep up or soak up with damp cloth.
For large spills, wear proper protective equipment and place waste material in closed container.
Dispose of in accordance with national and local regulations.

7.HANDLING AND STORAGE

Handling : Do not incinerate toner or a toner cartridge. Do not dissemble a cartridge.

Storage : Keep in cool, dry and well-ventilated area. Keep out of reach of children.

8.EXPOSURE CONTROL /PERSONAL PROTECTION

Control Parameter
ACGIH TLV (2003) : 10 mg/m^3 (Total)
3 mg/m^3 (Respirable)

Precautionary Measures : None required when used as intended in Fuji Xerox equipment.
For use other than normal customer operating procedures(such as in bulk toner processing facilities), local exhaust ventilation may be required.

Personal Protective Equipment: None required when used as intended in Fuji Xerox equipment.
For use other than normal customer operating procedures(such as in bulk toner processing facilities), protective glove, goggles and respirators may be required.

9.PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor:	Black Powder / Faint Odor		
Boiling Point(OC):	Not applicable	Vapour Pressure:	Not applicable
Volatile (%):	Not applicable	Softening Point:	Not available
Specific Gravity(H_2O=1):	Not available	Initial Boiling Point:	Not applicable
Solubility in water:	Negligible	Other Data:	None

10.STABILITY AND REACTIVITY

Flash Point(OC) :Not applicable Auto-Ignition Temperature:Not applicable

Explosion Limit :Not applicable

Flammability :Not flammable under conditions of use

Spontaneous Combustibility / Reactivity with water :None

Self-reactivity / Explosive :None

Dust Explosive : Like most organic materials in powder form, it can form explosive mixtures when dispersed in air.

Stability and Reactivity :Stable

Other Data :None

11.TOXICOLOGICAL INFORMATION

Skin Corrosive : None
Skin Irritant (rabbit) : Not an irritant [1] Eye Irritant (rabbit): Not an irritant [1]
Human Patch : No evidence of skin irritation or sensitization. [1]
Sensitization : Skin (guinea-pig) : Not a sensitizer [1]
Acute Toxicity Swallowed→LD50 (rat) : > 5000 mg/kg [1] (practically non-toxic)
Skin→LD50 (rabbit) : > 5000mg/ kg [1] (practically non-toxic)
Inhaled→LC50 (rat) : > 5mg/L/4hr [1] (practically non-toxic)

Chronic Toxicity : The results obtained from a Xerox sponsored, Chronic Toner Inhalation Study, demonstrated no lung change in rats for the lowest (1mg/m3) exposure level (i.e. the level most relevant to potential human exposure). A very slight degree of fibrosis was noted in 25% of the animals at the middle (4mg/m3) exposure level, while a slight degree of fibrosis was noted in all the animals at the highest (16 mg/m3) exposure level. These findings are attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged period. This study was conducted using a special test toner to comply with EPA testing protocol. The test toner was ten times more respirable than commercially available Xerox toner, and would not be functionally suitable for Xerox equipment.[1]

Carcinogenicity : Carbon Black is classified as "Group 2B(possibly carcinogenic to humans) " by IARC. But we obtained the results from a Chronic Toner Inhalation Study, that commercially available Xerox toner has no evidence of human carcinogens. All other ingredients are not classified as "Carcinogens [ref.1]".

Mutagenicity: Ames Assay: Negative [1]

Reproduction and Development: Not classified as " Reproductive and Development chemicals [ref.2]".

1) This information is based on toxicity data for similar materials and ingredients.

12.ECOLOGICAL INFORMATION

Biodegradability : Not available.
Bioaccumulation : Not available.
Acute Toxicity : Not available.
Other Information : None

13.DISPOSAL CONSIDERATION

Dispose of in accordance with national and local regulations.

14.TRANSPORT INFORMATION

Transport in accordance with national, and local regulations.

15.REGULATORY INFORMATION

Ensure this product in compliance with national requirements and ensure conformity to local regulations.

16.OTHER INFORMATION

The above mentioned data correspond to our present state of knowledge and experience, but no warranty is made. Users should consider these data only as a supplement to other information and must make independent determination of the suitability and completeness of information from all sources to ensure proper use and disposal of the materials and safety and health of employees and customers.

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◆ TLVs and BEIs (American Conference of Governmental Industrial Hygienists)
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◆ Journal of Occupational Health(Japan Society for Occupational Heatth)
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THE DOCUMENT COMPANY
FUJI XEROX

Material Safety Data Sheet

MSDS No.: **TN128-00MO** | Date | Revision : **2003.09.23**

1. PRODUCT AND COMPANY IDENTIFICATION

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Product Name:

Color Laser Printer T8024 Toner(Black)

2. COMPOSITION, INFORMATION ON INGREDIENTS

Chemical Nature:

Chemical Name	Ingredients (% by wt.)	CAS Registry Number
Polyester	80-90	—
Carbon black	< 5	1333-86-4
Paraffin waxes	< 5	—
Vegetable wax	< 5	—
Amorphous silica	< 5	—

UN Hazard Class : None UN Number : None

3.HAZARDOUS IDENTIFICATION

Physical and Chemical Hazard: None
Adverse Human Health Effects: None
Environmental Effects: None

4.FIRST-AID MEASURES

Eye contact : Flush with a large amount of water for at least 15 minutes. Seek medical advice.
Skin contact : Wash with soap and water.
Inhalation : Remove from exposure and provide fresh air. Rinse mouth with water.
Ingestion : Rinse mouth with water. Give several glasses of water to drink and seek medical advice.

5.FIRE-FIGHTING MEASURES

Specifid method : In case of fire use extinguishing media.
When in a machine, treat as an electrical fire.

Extingishing media : Water spray, Foam, Dry chemicals

6.ACCIDENTAL RELEASE MEASURES

Shut off ignition sources. For small spills, sweep up or soak up with damp cloth.
For large spills, wear proper protective equipment and place waste material in closed container.
Dispose of in accordance with national and local regulations.

7.HANDLING AND STORAGE

Handling : Do not incinerate toner or a toner cartridge. Do not dissemble a cartridge.

Storage : Keep in cool, dry and well-ventilated area. Keep out of reach of children.

8.EXPOSURE CONTROL /PERSONAL PROTECTION

Control Parameter
ACGIH TLV (2003) : 10 mg/m^3 (Total)
3 mg/m^3 (Respirable)

Precautionary Measures : None required when used as intended in Fuji Xerox equipment.
For use other than normal customer operating procedures(such as in bulk toner processing facilities), local exhaust ventilation may be required.

Personal Protective Equipment: None required when used as intended in Fuji Xerox equipment.
For use other than normal customer operating procedures(such as in bulk toner processing facilities), protective glove, goggles and respirators may be required.

9.PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor:	Black Powder / Faint Odor		
Boiling Point(OC):	Not applicable	Vapour Pressure:	Not applicable
Volatile (%):	Not applicable	Softening Point:	Not available
Specific Gravity(H_2O=1):	Not available	Initial Boiling Point:	Not applicable
Solubility in water:	Negligible	Other Data:	None

10.STABILITY AND REACTIVITY

Flash Point(OC) :Not applicable Auto-Ignition Temperature:Not applicable

Explosion Limit :Not applicable

Flammability :Not flammable under conditions of use

Spontaneous Combustibility / Reactivity with water :None

Self-reactivity / Explosive :None

Dust Explosive : Like most organic materials in powder form, it can form explosive mixtures when dispersed in air.

Stability and Reactivity :Stable

Other Data :None

11.TOXICOLOGICAL INFORMATION

Skin Corrosive : None
Skin Irritant (rabbit) : Not an irritant Eye Irritant (rabbit): Not an irritant
Human Patch : Not available
Sensitization : Skin (guinea-pig) : Not a sensitizer
Acute Toxicity Swallowed→LD50 (rat) : > 5000 mg/kg[1)] (practically non-toxic)
Skin→LD50 (rabbit) : > 5000 mg/kg[1)] (practically non-toxic)
Inhaled→LC50 (rat) : > 5 mg/L/4hr[1)] (practically non-toxic)

Chronic Toxicity : The results obtained from a Xerox sponsored, Chronic Toner Inhalation Study, demonstrated no lung change in rats for the lowest (1mg/m3) exposure level (i.e. the level most relevant to potential human exposure). A very slight degree of fibrosis was noted in 25% of the animals at the middle (4mg/m3) exposure level, while a slight degree of fibrosis was noted in all the animals at the highest (16 mg/m3) exposure level. These findings are attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged period. This study was conducted using a special test toner to comply with EPA testing protocol. The test toner was ten times more respirable than commercially available Xerox toner, and would not be functionally suitable for Xerox equipment.[1)]

Carcinogenicity : Not classified as "Carcinogens [ref.1]".

Mutagenicity: Ames Assay: Negative

Reproduction and Development: Not classified as " Reproductive and Development chemicals [ref.2]".

1) This information is based on toxicity data for similar materials and ingredients.

12.ECOLOGICAL INFORMATION

Biodegradability : Not available.
Bioaccumulation : Not available.
Acute Toxicity :
Fish 96hr LC50 (Oryzias latipes): > 500 mg/L
Daphnia 48hr EC50 (Daphnia magna): > 100 mg/L
Algae 72hr IC50 (Selenastrum capricornutum): > 100 mg/L
Other Information : None

13.DISPOSAL CONSIDERATION

Dispose of in accordance with national and local regulations.

14.TRANSPORT INFORMATION

Transport in accordance with national, and local regulations.

15.REGULATORY INFORMATION

Ensure this product in compliance with national requirements and ensure conformity to local regulations.

16.OTHER INFORMATION

The above mentioned data correspond to our present state of knowledge and experience, but no warranty is made. Users should consider these data only as a supplement to other information and must make independent determination of the suitability and completeness of information from all sources to ensure proper use and disposal of the materials and safety and health of employees and customers.

References

1: ◆ IARC Monographs on the Evaluation Carcinogenic Risks to Humans (WHO.International Agency for Research on Cancer)
◆ National Toxicology Program(NTP) Report on Carcinogens (NTP)
◆ TLVs and BEIs (American Conference of Governmental Industrial Hygienists)
◆ Council Directive 67/548/EEC on the approximation of the laws, regulations, and administratives provisions relating to the classification, packing and labelling of dangerous substances; Annex 1 (EU)
◆ Journal of Occupational Health(Japan Society for Occupational Heatth)
2: ◆ Council Directive 67/548/EEC on the approximation of the laws, regulations, and administratives provision s relating to the classification, packing and labelling of dangerous substaces; Annex 1 (EU)