

Section 1. Chemical Product and Company Identification

Product Name **Black Toner For KM-C2230**
Manufacturer Kyocera Mita Corporation
Address Kyocera Mita America, Inc.
 225 Sand Road
 Fairfield, NJ 07004
Telephone Number (973)-808-8444
Date February 02, 2005

Section 2. Composition/Information on Ingredients

Hazardous Components (Chemical Identity, Common Name/s)	OSHA PEL	ACGIH TLV	NOHSC	%
(CAS No. 1333-86-4) Carbon black	3.5mg/m ³	3.5mg/m ³		1-10
(Non Hazardous Ingredients)				
Styrene-acrylate copolymer	Not listed	Not listed	Not listed	80-90
Wax	Not listed	Not listed	Not listed	1-10
Titanium compound	Not listed	Not listed	Not listed	1-10
(CAS No. 7631-86-9) Amorphous silica	Not listed	Not listed	Not listed	<1

Carbon Black-(CAS No. 1333-86-4)

OSHA Z-Tables(USA):3.5mg/m³,NTP(USA): Not Listed; California Proposition 65(USA): Listed; Symbol(EC): Not Listed; DFG-MAK(GER):III 3B;
 EEC No. 215-609-9;ACGIH-TLV(USA): 3.5mg/m³; IARC Monographs: Group 2B; R-Phrase(EC): Not Listed; Worksafe-TWA(Austl): 3mg/m³

Section 3. Hazards Identification

Emergency Overview Black powder (mean dia. Is about 6.5µm by volume). Almost odorless.
Classification Not classified as dangerous.(1999/45/EC)
Most Important Hazards and Effects of the Products
 Ingestion None currently known.
 Inhalation None currently known. Minimal respiratory tract irritation may occur as with exposure to large amount of any non-toxic dust.
 Eye None currently known.
 Skin None currently known.
 Chronic Effects Prolonged inhalation of excessive dusts may cause lung damage. Use of this products, as intended, does not result in inhalation of excessive dust.
Environmental Hazards No data is available on the adverse effects of this product on the environment.
Specific Hazards Dust explosion(like most finely divided organic powders).

Section 4. First Aid Measures

Inhalation	Remove from exposure to fresh air. Seek medical treatment.
Skin Contact	Wash with soap and water. If irritation does occur, seek medical treatment.
Eye Contact	Do not rub eyes. Flush thoroughly with water and seek medical treatment.
Ingestion	Ingestion is not applicable route of entry for intended use. Wash out mouth with water. If irritation or discomfort occurs, seek medical treatment immediately.

Section 5. Fire Fighting Measures

Extinguishing Media	CO ₂ , water, spray, foam and Dry Chemical.
Extinguishing Media To Avoid	Full water jet.
Fire and Explosion Hazards	If dispersed in the air, like most finely divided organic powders, may form an explosive mixture.
Protection of Firefighters	Use self-contained breathing apparatus (SCBA).

Section 6. Accidental Release Measures

Personal Precautions	No special precaution.
Environmental Precautions	No special precaution.
Method for Cleaning Up	Wear personal protective equipment(See Section 8). Vacuum or sweep material and place in a bag and hold for waste disposal. Use vacuum equipped with High Efficiency Particulate Air (HEPA) filter. Vacuum should be electrically bonded and grounded to dispel static electricity. To avoid dust generation, do not sweep dry.

Section 7. Handling and Storage

Handling	
Technical Measures	None
Precautions	Do not breathe dust. Avoid contact with eyes.
Safe Handling Advice	Try not to disperse the particles.
Storage	
Technical Measures	None
Storage Conditions	Keep container closed. Store in a cool and dry place. Keep out of reach of children.
Incompatible Products	None
Packing Materials	Bottles or Cartridge designated by Kyocera Mita.

Section 8. Exposure Controls/Personal Protection

Engineering Measures

Ventilation	None required with intended use.			
Control Parameters (As total dust)	OSHA-PEL	15mg/m ³	ACGIH-TLV(USA)	10mg/m ³
	DFG-MAK (GER)	4mg/m ³	Worksafe-TWA(Austl.)	10mg/m ³
Personal Protection Equipment(s)	None required under normal use. For use other than normal customer-operating procedures (such as in the event of a large spill), goggles and respirators may be required.			
Hygiene Measures	Wash hands after handling.			

Section 9. Physical and Chemical Properties

Appearance	Solid, Black fine powder.
Form	Black power (mean dia. Is about 6.5µm by volume).
Odor	Almost Odorless
PH	Not applicable
Boiling Point	Not applicable
Melting Point	No data available
Softening Point	125°C
Flash Point	Not applicable
Ignition Temperature	No data available
Explosion Properties	No data available
Vapor Pressure	Not applicable
Density (g/cm ³)	1.2
Solubility in water	Insoluble in water
Partition Coefficient (n-Octanol/Water)	Not applicable

Section 10. Stability and Reactivity

Stability/Reactivity	Stable, except above 200°C (392F)
Hazardous Reactions	Dust explosion, like most finely divided organic powders.
Conditions to avoid	Electric discharge, throwing into fire.
Materials to avoid	Oxidizing materials.
Hazardous Decomposition Products	CO, CO ₂ , No _x and smoke.
Hazardous Polymerization	Will not occur.

Section 11. Toxicological Information

Acute toxicity

Inhalation, LC ₅₀ (mg/l)	>5.14(rat,4hour)(Based on data for other products with similar ingredients.) This was the highest attainable concentration.
Ingestion(oral), LD ₅₀ (mg/kg)	>2,000(rat)(Based on data for other products with similar ingredients.)
Dermal, LD ₅₀ (mg/kg)	No data available.
Eye irritation	Minimal irritant(rabbit)(Based on data for other products with similar ingredients.)
Skin irritation	Non-irritant(rabbit)(Based on data for other products with similar ingredients.)
Skin sensitization	Non sensitizater(guinea pig)(Based on data for other products with similar ingredients.)
Mutagenicity	Ames Test is Negative.(Based on data for other products with similar ingredients.)

Chronic Toxicity or Long Term Toxicity

In a two year inhalation study of chronic toxicity and carcinogenicity using a typical toner in rats, there were no lung changes at all in the lowest exposure level (1mg/m³), the most relevant level to potential human exposures. A minimal to mild degree of fibrosis was noted in 22% of the animals at the middle exposure level (4mg/m³), and a mild to moderate degree of fibrosis was observed in 92% of the rats at the highest exposure level (16m/m³).

The lung changes observed in the higher exposure groups are interpreted in terms of "lung overloading" a series of generic responses to the presence of large quantities of respirable insoluble and relatively benign dusts retained for extended time periods in the lungs. Lung tumor frequency was unchanged among rats exposed to toner at the three exposure levels, and for air-only control rats.

Carcinogenicity

In 1996, the IARC reevaluated carbon black as a Group 2B carcinogen (possible human carcinogen). This evaluation is given to carbon black for which there is inadequate human evidence, but sufficient animal evidence. The latter is based upon the development of lung tumors in rat receiving chronic inhalation exposures to free carbon black at level that induce particle overload of the lung. Studies performed in animal models other than rats have not demonstrated an association between carbon black and lung tumors. Moreover, a two-year's cancer bioassay using a typical toner preparation containing carbon black demonstrated no association between toner exposure and tumor development in rats.

Section 12. Ecological Information

No data is available on the adverse effects of this material on the environment.

Ecotoxicity	No data available
Mobility	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available

Section 13. Disposal Considerations

Method of Disposal	Dispose/incinerate in accordance with local, state and federal regulations. Do not throw toner cartridge or toner into an open flame. The hot toner may scatter and cause burns or other damage.
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Section 14. Transport Information

Information on Code and Classifications According to International Regulations

UN Classification	None
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Section 15. Regulatory Information

<u>US Information</u>	Information on the label not required.
TSCA (Toxic Substances Control Act)	All chemical substances in this product comply with all applicable rules or order under TSCA.
California Proposition 65	Ingredient carbon black subject to California Proposition 65 is bound in polymer-matrices so that warnings are not required.
<u>EU Information</u>	Information on the label (1999/45/EC and 67/548/EEC) not required.
Article 14 (2.1) of Directive 1999/45/EC is not applicable to this product.	

Section 16. Other Information

NFPA HAZARD RATING: The National Fire Protection Agency (USA)
Health: 1 Flammability: 1 Reactivity: 0

HMS RATING: The National Paint and Coating Association (USA)
Health: 1 Flammability: 1 Reactivity: 0

Recommended Uses Toner for Electrophotographic Equipment

Explanation of term IARC 2B means "possible human carcinogen".

Literature References:

ANSI Z400.1-1993, ISO 11014-1; Comission Directive 91/155/EEC
IARC(1996) IARC monographs on the Evaluation of the Carcinogenic Risk of chemicals to Humans, Vol. 65, Printing Process and Printing Inks, Carbon Black and Some Nitro Compounds, Lyon, pp. 149-261.

H. Muhle, B.Bellmann, O.Creutzenberg, C. Dasenbrock, H. Ernst, R. Kilpper, J.C. MacKenzie, P.Morrow, U. Mohr, S. Takenaka, and R. Mermelstein(1991)
Fundamental and Applied Toxicology 17, pp.280-299.
Pulmonary Response to Toner upon Chronic inhalation Exposure in Rats.

Information on this data sheet represents our current data and the best opinion as to the proper use in handling of this product under normal conditions specified in our User's Manual. However, neither Kyocera Mita Corporation nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we do not guarantee that these are the only hazards which exist.

End of MSDS

Section 1. Chemical Product and Company Identification

Product Name **Cyan Toner For KM-C2230**
Manufacturer Kyocera Mita Corporation
Address Kyocera Mita America, Inc.
 225 Sand Road
 Fairfield, NJ 07004
Telephone Number (973)-808-8444
Date February 02, 2005

Section 2. Composition/Information on Ingredients

Hazardous Components (Chemical Identity, Common Name/s)	OSHA PEL	ACGIH TLV	NOHSC	%
None Present				
(Non Hazardous Ingredients)				
Styrene-acrylate copolymer	Not listed	Not listed	Not listed	80-90
Wax	Not listed	Not listed	Not listed	10-20
(CAS No. 147-14-8) Organic pigment	Not listed	Not listed	Not listed	1-10
Titanium compound	Not listed	Not listed	Not listed	1-10
(CAS No. 7631-86-9) Amorphous silica	Not listed	Not listed	Not listed	<1

Section 3. Hazards Identification

Emergency Overview Cyan powder (mean dia. Is about 6.5µm by volume).
 Almost odorless.

Classification Not classified as dangerous.(1999/45/EC)

Most Important Hazards and Effects of the Products
 Ingestion None currently known.
 Inhalation None currently known. Minimal respiratory tract irritation may occur as with exposure to large amount of any non-toxic dust.
 Eye None currently known.
 Skin None currently known.

Chronic Effects Prolonged inhalation of excessive dusts may cause lung damage. Use of this products, as intended, does not result in inhalation of excessive dust.

Environmental Hazards No data is available on the adverse effects of this product on the environment.

Specific Hazards Dust explosion(like most finely divided organic powders).

Section 4. First Aid Measures

Inhalation	Remove from exposure to fresh air. Seek medical treatment.
Skin Contact	Wash with soap and water. If irritation does occur, seek medical treatment.
Eye Contact	Do not rub eyes. Flush thoroughly with water and seek medical treatment. Do not attempt to manually remove anything stuck to eye(s).
Ingestion	Wash out mouth with water. Ingestion is not applicable route of entry for intended use. If irritation or discomfort occurs, seek medical treatment immediately.

Section 5. Fire Fighting Measures

Extinguishing Media	CO ₂ , water, spray, foam and Dry Chemical.
Extinguishing Media To Avoid	Full water jet.
Fire and Explosion Hazards	If dispersed in the air, like most finely divided organic powders, may form an explosive mixture.
Protection of Firefighters	Use self-contained breathing apparatus (SCBA).

Section 6. Accidental Release Measures

Personal Precautions	No special precaution.
Environmental Precautions	No special precaution.
Method for Cleaning Up	Wear personal protective equipment(See Section 8). Vacuum or sweep material and place in a bag and hold for waste disposal. Use vacuum equipped with High Efficiency Particulate Air (HEPA) filter. Vacuum should be electrically bonded and grounded to dispel static electricity. To avoid dust generation, do not sweep dry.

Section 7. Handling and Storage

Handling	
Technical Measures	None
Precautions	Do not breathe dust. Avoid contact with eyes.
Safe Handling Advice	Try not to disperse the particles.
Storage	
Technical Measures	None
Storage Conditions	Keep container closed. Store in a cool and dry place. Keep out of reach of children.
Incompatible Products	None
Packing Materials	Bottles or Cartridge designated by Kyocera Mita.

Section 8. Exposure Controls/Personal Protection

Engineering Measures	
Ventilation	None required with intended use.
Control Parameters (As total dust)	OSHA-PEL 15mg/m ³ ACGIH-TLV(USA) 10mg/m ³ DFG-MAK (GER) 4mg/m ³ Worksafe-TWA(Austl.) 10mg/m ³
Personal Protection Equipment(s)	None required under normal use. For use other than normal customer-operating procedures (such as in the event of a large spill), goggles and respirators may be required.
Hygiene Measures	Wash hands after handling.

Section 9. Physical and Chemical Properties

Appearance	Solid, Cyan fine powder
Odor	Almost odorless
Particle Size	6.5 μ m
PH/Boiling Point	Not applicable
Melting Point	No data available
Softening Point	125 $^{\circ}$ C
Flash Point	Not applicable
Ignition Temperature	No data available
Explosion Properties	No data available
Vapor Pressure	Not applicable
Density (g/cm 3)	1.2
Solubility in water	Insoluble in water.
Oxidizing Properties	No data available
Partition Coefficient (n-Octanol/Water)	Not applicable

Section 10. Stability and Reactivity

Stability/Reactivity	Stable except above 200 $^{\circ}$ C (392F)
Hazardous Reactions	Dust explosion, like most finely divided organic powders.
Conditions to avoid	Electric discharge, throwing into fire.
Materials to avoid	Oxidizing materials.
Hazardous Decomposition Products	CO, CO $_2$, No $_x$ and smoke.
Hazardous Polymerization	Will not occur.

Section 11. Toxicological Information

Acute toxicity

Inhalation, LC $_{50}$ (mg/l)	>5.17(rat,4hour)(Based on data for other products with similar ingredients.) This was the highest attainable concentration.
Ingestion(oral), LD $_{50}$ (mg/kg)	>2,000(rat)(Based on data for other products with similar ingredients.)
Dermal, LD $_{50}$ (mg/kg)	No data available.
Eye irritation	Minimal irritant(rabbit)(Based on data for other products with similar ingredients.)
Skin irritation	Non-irritant(rabbit)(Based on data for other products with similar ingredients.)
Skin sensitization	Non sensitisatizer(guinea pig)(Based on data for other products with similar ingredients.)
Mutagenicity	Ames Test is Negative.(Based on data for other products with similar ingredients.)

Chronic Toxicity or Long Term Toxicity

Prolonged inhalation of excessive dust may cause lung damage. It is attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. Use of this product, as intended, does not result in the inhalation of excessive dust.

In a study in rats by chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of the rats in the high concentration (16mg/m 3) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animal in the middle (4mg/m 3) exposure group. But no pulmonary change was reported in the lowest (1mg/m 3) exposure group, the most relevant level to potential human exposures.

Carcinogenicity

IARC Monographs	Not Listed
NTP (USA)	Not Listed
OSHA Regulated(USA)	Not Listed

Section 12. Ecological Information

No data is available on the adverse effects of this material on the environment.

Ecotoxicity	No data available
Mobility	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available

Section 13. Disposal Considerations

Method of Disposal Dispose/incinerate in accordance with local, state and federal regulations. Do not throw toner cartridge or toner into an open flame. The hot toner may scatter and cause burns or other damage.

Section 14. Transport Information

Information on Code and Classifications According to International Regulations
UN Classification None

Section 15. Regulatory Information

US Information Information on the label not required.
TSCA (Toxic Substances Control Act) All chemical substances in this product comply with all applicable rules or order under TSCA.
California Proposition 65 Ingredient carbon black subject to California Proposition 65 is bound in polymer-matrices so that warnings are not required.
EU Information Information on the label (1999/45/EC and 67/548/EEC) not required.
Article 14 (2.1) of Directive 1999/45/EC is not applicable to this product.

Section 16. Other Information

NFPA HAZARD RATING: The National Fire Protection Agency (USA)
Health: 1 Flammability: 1 Reactivity: 0

HMIS RATING: The National Paint and Coating Association (USA)
Health: 1 Flammability: 1 Reactivity: 0

Recommended Uses Toner for Electrophotographic Equipment

Literature References:

ANSI Z400.1-1993, ISO 11014-1; Comission Directive 91/155/EEC
IARC(1996) IARC monographs on the Evaluation of the Carcinogenic Risk of chemicals to Humans, Vol. 65, Printing Process and Printing Inks, Carbon Black and Some Nitro Compounds, Lyon, pp. 149-261.

H. Muhle, B.Bellmann, O.Creutzenberg, C. Dasenbrock, H. Ernst, R. Kilpper, J.C. MacKenzie, P.Morrow, U. Mohr, S. Takenaka, and R. Mermelstein(1991)
Fundamental and Applied Toxicology 17, pp.280-299.
Pulmonary Response to Toner upon Chronic inhalation Exposure in Rats.

Information on this data sheet represents our current data and the best opinion as to the proper use in handling of this product under normal conditions specified in our User's Manual. However, neither Kyocera Mita Corporation nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we do not guarantee that these are the only hazards which exist.

End of MSDS

Section 1. Chemical Product and Company Identification

Product Name **Magenta Toner For KM-C2230**
Manufacturer Kyocera Mita Corporation
Address Kyocera Mita America, Inc.
 225 Sand Road
 Fairfield, NJ 07004
Telephone Number (973)-808-8444
Date February 02, 2005

Section 2. Composition/Information on Ingredients

Hazardous Components (Chemical Identity, Common Name/s)	OSHA PEL	ACGIH TLV	NOHSC	%
None Present				
(Non Hazardous Ingredients)				
Styrene-acrylate copolymer	Not listed	Not listed	Not listed	80-90
Wax	Not listed	Not listed	Not listed	10-20
Organic pigment 1	Not listed	Not listed	Not listed	1-10
Organic pigment 2	Not listed	Not listed	Not listed	1-10
Titanium compound	Not listed	Not listed	Not listed	1-10
(CAS No. 7631-86-9) Amorphous silica	Not listed	Not listed	Not listed	<1

Section 3. Hazards Identification

Emergency Overview Magenta powder (mean dia. Is about 6.5µm by volume). Almost odorless.
Classification Not classified as dangerous.(1999/45/EC)
Most Important Hazards and Effects of the Products
 Ingestion None currently known.
 Inhalation None currently known. Minimal respiratory tract irritation may occur as with exposure to large amount of any non-toxic dust.
 Eye None currently known.
 Skin None currently known.
 Chronic Effects Prolonged inhalation of excessive dusts may cause lung damage. Use of this products, as intended, does not result in inhalation of excessive dust.
 Environmental Hazards No data is available on the adverse effects of this product on the environment.
Specific Hazards Dust explosion(like most finely divided organic powders).

Section 4. First Aid Measures

Inhalation	Remove from exposure to fresh air. Seek medical treatment.
Skin Contact	Wash with soap and water. If irritation does occur, seek medical treatment.
Eye Contact	Do not rub eyes. Flush thoroughly with water and seek medical treatment. Do not attempt to manually remove anything stuck to eye(s).
Ingestion	Wash out mouth with water. Ingestion is not applicable route of entry for intended use. If irritation or discomfort occurs, seek medical treatment immediately.

Section 5. Fire Fighting Measures

Extinguishing Media	CO ₂ , water, spray, foam and Dry Chemical.
Extinguishing Media To Avoid	Full water jet.
Fire and Explosion Hazards	If dispersed in the air, like most finely divided organic powders, may form an explosive mixture.
Protection of Firefighters	Use self-contained breathing apparatus (SCBA).

Section 6. Accidental Release Measures

Personal Precautions	No special precaution.
Environmental Precautions	No special precaution.
Method for Cleaning Up	Wear personal protective equipment(See Section 8). Vacuum or sweep material and place in a bag and hold for waste disposal. Use vacuum equipped with High Efficiency Particulate Air (HEPA) filter. Vacuum should be electrically bonded and grounded to dispel static electricity. To avoid dust generation, do not sweep dry.

Section 7. Handling and Storage

Handling	
Technical Measures	None
Precautions	Do not breathe dust. Avoid contact with eyes.
Safe Handling Advice	Try not to disperse the particles.
Storage	
Technical Measures	None
Storage Conditions	Keep container closed. Store in a cool and dry place. Keep out of reach of children.
Incompatible Products	None
Packing Materials	Bottles or Cartridge designated by Kyocera Mita.

Section 8. Exposure Controls/Personal Protection

Engineering Measures	
Ventilation	None required with intended use.
Control Parameters (As total dust)	OSHA-PEL 15mg/m ³ ACGIH-TLV(USA) 10mg/m ³ DFG-MAK (GER) 4mg/m ³ Worksafe-TWA(Austl.) 10mg/m ³
Personal Protection Equipment(s)	None required under normal use. For use other than normal customer-operating procedures (such as in the event of a large spill), goggles and respirators may be required.
Hygiene Measures	Wash hands after handling.

Section 9. Physical and Chemical Properties

Appearance	Solid, Magenta fine powder
Odor	Almost odorless
Particle Size	6.5µm
PH/Boiling Point	Not applicable
Melting Point	No data available
Softening Point	125°C
Flash Point	Not applicable
Ignition Temperature	No data available
Explosion Properties	No data available
Vapor Pressure	Not applicable
Density (g/cm ³)	1.2
Solubility in water	Insoluble in water
Partition Coefficient (n-Octanol/Water)	Not applicable

Section 10. Stability and Reactivity

Stability/Reactivity	Stable except above 200°C (392F).
Hazardous Reactions	Dust explosion, like most finely divided organic powders.
Conditions to avoid	Electric discharge, throwing into fire.
Materials to avoid	Oxidizing materials.
Hazardous Decomposition Products	CO, CO ₂ , No _x and smoke.
Hazardous Polymerization	Will not occur.

Section 11. Toxicological Information

Acute toxicity

Inhalation, LC ₅₀ (mg/l)	>4.99(rat,4hour)(Based on data for other products with similar ingredients.) This was the highest attainable concentration.
Ingestion(oral), LD ₅₀ (mg/kg)	>2,000(rat)(Based on data for other products with similar ingredients.)
Dermal, LD ₅₀ (mg/kg)	No data available.
Eye irritation	Minimal irritant(rabbit)(Based on data for other products with similar ingredients.)
Skin irritation	Non-irritant(rabbit)(Based on data for other products with similar ingredients.)
Skin sensitization	Non sensitizater(guinea pig)(Based on data for other products with similar ingredients.)
Mutagenicity	Ames Test is Negative.(Based on data for other products with similar ingredients.)

Chronic Toxicity or Long Term Toxicity

Prolonged inhalation of excessive dust may cause lung damage. It is attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. Use of this product, as intended, does not result in the inhalation of excessive dust.

In a study in rats by chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of the rats in the high concentration (16mg/m³) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animal in the middle (4mg/m³) exposure group. But no pulmonary change was reported in the lowest (1mg/m³) exposure group, the most relevant level to potential human exposures.

Carcinogenicity

IARC Monographs	Not Listed
NTP (USA)	Not Listed
OSHA Regulated(USA)	Not Listed

Section 12. Ecological Information

No data is available on the adverse effects of this material on the environment.

Ecotoxicity	No data available
Mobility	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available

Section 13. Disposal Considerations

Method of Disposal Dispose/incinerate in accordance with local, state and federal regulations. Do not throw toner cartridge or toner into an open flame. The hot toner may scatter and cause burns or other damage.

Section 14. Transport Information

Information on Code and Classifications According to International Regulations
UN Classification None

Section 15. Regulatory Information

US Information Information on the label not required.
TSCA (Toxic Substances Control Act) All chemical substances in this product comply with all applicable rules or order under TSCA.
California Proposition 65 Ingredient carbon black subject to California Proposition 65 is bound in polymer-matrices so that warnings are not required.
EU Information Information on the label (1999/45/EC and 67/548/EEC) not required.
Article 14 (2.1) of Directive 1999/45/EC is not applicable to this product.

Section 16. Other Information

NFPA HAZARD RATING: The National Fire Protection Agency (USA)
Health: 1 Flammability: 1 Reactivity: 0

HMIS RATING: The National Paint and Coating Association (USA)
Health: 1 Flammability: 1 Reactivity: 0

Recommended Uses Toner for Electrophotographic Equipment

Literature References:

- ANSI Z400.1-1993, ISO 11014-1; Comission Directive 91/155/EEC
- IARC(1996) IARC monographs on the Evaluation of the Carcinogenic Risk of chemicals to Humans, Vol. 65, Printing Process and Printing Inks, Carbon Black and Some Nitro Compounds, Lyon, pp. 149-261.

H. Muhle, B.Bellmann, O.Creutzenberg, C. Dasenbrock, H. Ernst, R. Kilpper, J.C. MacKenzie, P.Morrow, U. Mohr, S. Takenaka, and R. Mermelstein(1991)
Fundamental and Applied Toxicology 17, pp.280-299.
Pulmonary Response to Toner upon Chronic inhalation Exposure in Rats.

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End of MSDS

Section 1. Chemical Product and Company Identification

Product Name **Yellow Toner For KM-C2230**
Manufacturer Kyocera Mita Corporation
Address Kyocera Mita America, Inc.
 225 Sand Road
 Fairfield, NJ 07004
Telephone Number (973)-808-8444
Date February 02, 2005

Section 2. Composition/Information on Ingredients

Hazardous Components (Chemical Identity, Common Name/s)	OSHA PEL	ACGIH TLV	NOHSC	%
None Present				
(Non Hazardous Ingredients)				
Styrene-acrylate copolymer	Not listed	Not listed	Not listed	80-90
Wax	Not listed	Not listed	Not listed	10-20
Organic pigment	Not listed	Not listed	Not listed	1-10
Titanium compound	Not listed	Not listed	Not listed	1-10
(CAS No. 7631-86-9) Amorphous silica	Not listed	Not listed	Not listed	<1

Section 3. Hazards Identification

Emergency Overview Yellow powder (mean dia. Is about 6.5µm by volume). Almost odorless.
Classification Not classified as dangerous.(1999/45/EC)
Most Important Hazards and Effects of the Products
 Ingestion None currently known.
 Inhalation None currently known. Minimal respiratory tract irritation may occur as with exposure to large amount of any non-toxic dust.
 Eye None currently known.
 Skin None currently known.
Chronic Effects Prolonged inhalation of excessive dusts may cause lung damage. Use of this products, as intended, does not result in inhalation of excessive dust.
Environmental Hazards No data is available on the adverse effects of this product on the environment.
Specific Hazards Dust explosion(like most finely divided organic powders).

Section 4. First Aid Measures

Inhalation	Remove from exposure to fresh air. Seek medical treatment.
Skin Contact	Wash with soap and water. If irritation does occur, seek medical treatment.
Eye Contact	Do not rub eyes. Flush thoroughly with water and seek medical treatment. Do not attempt to manually remove anything stuck to eye(s).
Ingestion	Wash out mouth with water. Ingestion is not applicable route of entry for intended use. If irritation or discomfort occurs, seek medical treatment immediately.

Section 5. Fire Fighting Measures

Extinguishing Media	CO ₂ , water, spray, foam and Dry Chemical.
Extinguishing Media To Avoid	Full water jet.
Fire and Explosion Hazards	If dispersed in the air, like most finely divided organic powders, may form an explosive mixture.
Protection of Firefighters	Use self-contained breathing apparatus (SCBA).

Section 6. Accidental Release Measures

Personal Precautions	No special precaution.
Environmental Precautions	No special precaution.
Method for Cleaning Up	Wear personal protective equipment(See Section 8). Vacuum or sweep material and place in a bag and hold for waste disposal. Use vacuum equipped with High Efficiency Particulate Air (HEPA) filter. Vacuum should be electrically bonded and grounded to dispel static electricity. To avoid dust generation, do not sweep dry.

Section 7. Handling and Storage

Handling	
Technical Measures	None
Precautions	Do not breathe dust. Avoid contact with eyes.
Safe Handling Advice	Try not to disperse the particles.
Storage	
Technical Measures	None
Storage Conditions	Keep container closed. Store in a cool and dry place. Keep out of reach of children.
Incompatible Products	None
Packing Materials	Bottles or Cartridge designated by Kyocera Mita.

Section 8. Exposure Controls/Personal Protection

Engineering Measures	
Ventilation	None required with intended use.
Control Parameters (As total dust)	OSHA-PEL 15mg/m ³ ACGIH-TLV(USA) 10mg/m ³ DFG-MAK (GER) 4mg/m ³ Worksafe-TWA(Austl.) 10mg/m ³
Personal Protection Equipment(s)	None required under normal use. For use other than normal customer-operating procedures (such as in the event of a large spill), goggles and respirators may be required.
Hygiene Measures	Wash hands after handling.

Section 9. Physical and Chemical Properties

Appearance	Solid, Yellow fine powder
Odor	Almost odorless
Particle Size	6.5µm
PH/Boiling Point	Not applicable
Melting Point	No data available
Softening Point	125°C
Flash Point	Not applicable
Ignition Temperature	No data available
Explosion Properties	No data available
Vapor Pressure	Not applicable
Density (g/cm ³)	1.2
Solubility in water	Insoluble in water
Partition Coefficient (n-Octanol/Water)	Not applicable

Section 10. Stability and Reactivity

Stability/Reactivity	Stable except above 200°C (392F).
Hazardous Reactions	Dust explosion, like most finely divided organic powders.
Conditions to avoid	Electric discharge, throwing into fire.
Materials to avoid	Oxidizing materials.
Hazardous Decomposition Products	CO, CO ₂ , NO _x and smoke.
Hazardous Polymerization	Will not occur.

Section 11. Toxicological Information

Acute toxicity

Inhalation, LC ₅₀ (mg/l)	>4.8(rat,4hour)(Based on data for other products with similar ingredients.) This was the highest attainable concentration.
Ingestion(oral), LD ₅₀ (mg/kg)	>2,000(rat)(Based on data for other products with similar ingredients.)
Dermal, LD ₅₀ (mg/kg)	No data available.
Eye irritation	Minimal irritant(rabbit)(Based on data for other products with similar ingredients.)
Skin irritation	Non-irritant(rabbit)(Based on data for other products with similar ingredients.)
Skin sensitization	Non sensitizater(guinea pig)(Based on data for other products with similar ingredients.)
Mutagenicity	Ames Test is Negative.(Based on data for other products with similar ingredients.)

Chronic Toxicity or Long Term Toxicity

Prolonged inhalation of excessive dust may cause lung damage. It is attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. Use of this product, as intended, does not result in the inhalation of excessive dust.

In a study in rats by chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of the rats in the high concentration (16mg/m³) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animal in the middle (4mg/m³) exposure group. But no pulmonary change was reported in the lowest (1mg/m³) exposure group, the most relevant level to potential human exposures.

Carcinogenicity

IARC Monographs	Not Listed
NTP (USA)	Not Listed
OSHA Regulated(USA)	Not Listed

Section 1. Chemical Product and Company Identification

Product Name **Black Developer For KM-C2230**
Manufacturer Kyocera Mita Corporation
Address Kyocera Mita America, Inc.
 225 Sand Road
 Fairfield, NJ 07004
Telephone Number (973)-808-8444
Date February 02, 2005

Section 2. Composition/Information on Ingredients

Hazardous Components (Chemical Identity, Common Name/s)	OSHA PEL	ACGIH TLV	NOHSC	%
(CAS No. 1333-86-4) Carbon black	3.5mg/m ³	3.5mg/m ³		<1
(Non Hazardous Ingredients)				
(CAS No. 1309-37-1) Ferrite Iron oxide	5mg/m ³	0.2mg/m ³		40-50
(CAS No. 1309-48-4) Magnesium oxide				30-40
(CAS No. 1344-43-0) Manganese oxide	5mg/m ³	0.2mg/m ³		1-10
Styrene-acrylic resin	Not listed	Not listed	Not listed	1-10
Acryl resin	Not listed	Not listed	Not listed	1-10

Carbon Black (CAS No. 1333-86-4)
 IARC Monographs: Group 2B/Worksafe; TWA(Austl):3mg/m³; DFG-MAK(GER):III3B

Manganese Oxide(CAS No. 1344-43-0)
 OSHA Z-Tables(USA):Ceiling 5mg/m³; ACGIH-TLV(USA):0.2mg/m³; Worksafe-TWA(Austl):1mg/m³

Section 3. Hazards Identification

Emergency Overview Black powder (mean dia. is about 30µm by volume). Almost odorless.
Classification Not classified as dangerous.(1999/45/EC)
Most Important Hazards and Effects of the Products
 Ingestion None currently known.
 Inhalation None currently known. Minimal respiratory tract irritation may occur as with exposure to large amount of any non-toxic dust.
 Eye None currently known.
 Skin None currently known.
 Chronic Effects Prolonged inhalation of excessive dusts may cause lung damage. Use of this products, as intended, does not result in inhalation of excessive dust.
 Environmental Hazards No data is available on the adverse effects of this product on the environment.
Specific Hazards Dust explosion(like most finely divided organic powders).

Section 4. First Aid Measures

Inhalation	Remove from exposure to fresh air. Seek medical treatment.
Skin Contact	Wash with soap and water. If irritation does occur, seek medical treatment.
Eye Contact	Do not rub eyes. Flush thoroughly with water and seek medical treatment. Do not attempt to manually remove anything stuck to eye(s).
Ingestion	Wash out mouth with water. Ingestion is not applicable route of entry for intended use. If irritation or discomfort occurs, seek medical treatment immediately.

Section 5. Fire Fighting Measures

Extinguishing Media	CO ₂ , water, spray, foam and Dry Chemical.
Extinguishing Media To Avoid	Full water jet.
Fire and Explosion Hazards	If dispersed in the air, like most finely divided organic powders, may form an explosive mixture.
Protection of Firefighters	Use self-contained breathing apparatus (SCBA).

Section 6. Accidental Release Measures

Personal Precautions	No special precaution.
Environmental Precautions	No special precaution.
Method for Cleaning Up	Wear personal protective equipment(See Section 8). Vacuum or sweep material and place in a bag and hold for waste disposal. Use vacuum equipped with High Efficiency Particulate Air (HEPA) filter. Vacuum should be electrically bonded and grounded to dispel static electricity. To avoid dust generation, do not sweep dry.

Section 7. Handling and Storage

Handling	
Technical Measures	None
Precautions	Do not breathe dust. Avoid contact with eyes.
Safe Handling Advice	Try not to disperse the particles.
Storage	
Technical Measures	None
Storage Conditions	Keep container closed. Store in a cool and dry place. Keep out of reach of children.
Incompatible Products	None
Packing Materials	Bottles or Cartridge designated by Kyocera Mita.

Section 8. Exposure Controls/Personal Protection

Engineering Measures

Ventilation	None required with intended use.			
Control Parameters (As total dust)	OSHA-PEL	15mg/m ³	ACGIH-TLV(USA)	10mg/m ³
	DFG-MAK (GER)	4mg/m ³	Worksafe-TWA(Austl.)	10mg/m ³
Personal Protection Equipment(s)	None required under normal use. For use other than normal customer-operating procedures (such as in the event of a large spill), goggles and respirators may be required.			
Hygiene Measures	Wash hands after handling.			

Section 9. Physical and Chemical Properties

Appearance	Solid, Black fine powder
Odor	Almost odorless
Particle Size	30 μ m
PH/Boiling Point	Not applicable
Melting Point	No data available
Softening Point	125°C
Flash Point	Not applicable
Ignition Temperature	No data available
Explosion Properties	No data available
Vapor Pressure	Not applicable
Density (g/cm ³)	5.0
Solubility in water	Insoluble in water
Partition Coefficient (n-Octanol/Water)	Not applicable

Section 10. Stability and Reactivity

Stability/Reactivity	Stable except above 200°C (392F).
Hazardous Reactions	Dust explosion, like most finely divided organic powders.
Conditions to avoid	Electric discharge, throwing into fire.
Materials to avoid	Oxidizing materials.
Hazardous Decomposition Products	CO, CO ₂ , NO _x and smoke.
Hazardous Polymerization	Will not occur.

Section 11. Toxicological Information

Acute toxicity

Inhalation, LC ₅₀ (mg/l)	No data available.
Ingestion(oral), LD ₅₀ (mg/kg)	>2,000(rat)(Based on data for other products with similar ingredients.)
Dermal, LD ₅₀ (mg/kg)	No data available.
Eye irritation	Minimal irritant(rabbit)(Based on data for other products with similar ingredients.)
Skin irritation	Non-irritant(rabbit)(Based on data for other products with similar ingredients.)
Skin sensitization	Non sensitizater(guinea pig)(Based on data for other products with similar ingredients.)
Mutagenicity	Ames Test is Negative.(Based on data for other products with similar ingredients.)

Chronic Toxicity or Long Term Toxicity

In a two year inhalation study of chronic toxicity and carcinogenicity using a typical toner in rats, there were no lung changes at all in the lowest exposure level (1mg/m³), the most relevant level to potential human exposures. A minimal to mild degree of fibrosis was noted in 22% of the animals at the middle exposure level (4mg/m³), and a mild to moderate degree of fibrosis was observed in 92% of the rats at the highest exposure level (16m/m³).

The lung changes observed in the higher exposure groups are interpreted in terms of "lung overloading" a series of generic responses to the presence of large quantities of respirable insoluble and relatively benign dusts retained for extended time periods in the lungs. Lung tumor frequency was unchanged among rats exposed to toner at the three exposure levels, and for air-only control rats.

Carcinogenicity

In 1996, the IARC reevaluated carbon black as a Group 2B carcinogen (possible human carcinogen). This evaluation is given to carbon black for which there is inadequate human evidence, but sufficient animal evidence. The latter is based upon the development of lung tumors in rat receiving chronic inhalation exposures to free carbon black at level that induce particle overload of the lung.

Studies performed in animal models other than rats have not demonstrated an association between carbon black and lung tumors. Moreover, a two-year's cancer bioassay using a typical toner preparation containing carbon black demonstrated no association between toner exposure and tumor development in rats.

Studies performed in animal models other than rats have not demonstrated an association between carbon black and lung tumors. Moreover, a two-year's cancer bioassay using a typical toner preparation containing carbon black demonstrated no association between toner exposure and tumor development in rats.

Section 12. Ecological Information

No data is available on the adverse effects of this material on the environment.

Ecotoxicity	No data available
Mobility	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available

Section 13. Disposal Considerations

Method of Disposal	Dispose/incinerate in accordance with local, state and federal regulations. Do not throw toner cartridge or toner into an open flame. The hot toner may scatter and cause burns or other damage.
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Section 14. Transport Information

Information on Code and Classifications According to International Regulations	
UN Classification	None

Section 15. Regulatory Information

<u>US Information</u>	Information on the label not required.
TSCA (Toxic Substances Control Act)	All chemical substances in this product comply with all applicable rules or order under TSCA.
California Proposition 65	Ingredient carbon black subject to California Proposition 65 is bound in polymer-matrices so that warnings are not required.
<u>EU Information</u>	Information on the label (1999/45/EC and 67/548/EEC) not required.
Article 14 (2.1) of Directive 1999/45/EC is not applicable to this product.	

Section 16. Other Information

NFPA HAZARD RATING: The National Fire Protection Agency (USA)
Health: 1 Flammability: 1 Reactivity: 0

HMIS RATING: The National Paint and Coating Association (USA)
Health: 1 Flammability: 1 Reactivity: 0

Recommended Uses Toner for Electrophotographic Equipment

Explanation of term IARC 2B means "possible human carcinogen".

Literature References:

ANSI Z400.1-1993, ISO 11014-1; Comission Directive 91/155/EEC
IARC(1996) IARC monographs on the Evaluation of the Carcinogenic Risk of chemicals to Humans, Vol. 65, Printing Process and Printing Inks, Carbon Black and Some Nitro Compounds, Lyon, pp. 149-261.

H. Muhle, B.Bellmann, O.Creutzenberg, C. Dasenbrock, H. Ernst, R. Kilpper, J.C. MacKenzie, P.Morrow, U. Mohr, S. Takenaka, and R. Mermelstein(1991)
Fundamental and Applied Toxicology 17, pp.280-299.
Pulmonary Response to Toner upon Chronic inhalation Exposure in Rats.

Information on this data sheet represents our current data and the best opinion as to the proper use in handling of this product under normal conditions specified in our User's Manual. However, neither Kyocera Mita Corporation nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we do not guarantee that these are the only hazards which exist.

End of MSDS

Section 1. Chemical Product and Company Identification

Product Name **Cyan Developer For KM-C2230**
Manufacturer Kyocera Mita Corporation
Address Kyocera Mita America, Inc.
 225 Sand Road
 Fairfield, NJ 07004
Telephone Number (973)-808-8444
Date February 02, 2005

Section 2. Composition/Information on Ingredients

Hazardous Components (Chemical Identity, Common Name/s)	OSHA PEL	ACGIH TLV	NOHSC	%
(CAS No. 1344-43-0) Manganese oxide	5mg/m ³	0.2mg/ ³		1-10
(Non Hazardous Ingredients)				
(CAS No. 1309-37-1) Ferrite Iron oxide	Not listed	Not listed	Not listed	40-50
(CAS No. 1309-48-4) Magnesium oxide	Not listed	Not listed	Not listed	30-40
Styrene-acrylic resin	Not listed	Not listed	Not listed	1-10
Acryl resin	Not listed	Not listed	Not listed	1-10

Manganese oxide(CAS No. 1344-43-0)

OSHA Z-Tables(USA):Ceiling 5mg/m³; ACGIH-TLV(USA):0.2mg/m³; Worksafe-TWA(Austl): 1mg/m³

Section 3. Hazards Identification

Emergency Overview Cyan powder (mean dia. Is about 30µm by volume). Almost odorless.
Classification Not classified as dangerous.(1999/45/EC)
Most Important Hazards and Effects of the Products
 Ingestion None currently known.
 Inhalation None currently known. Minimal respiratory tract irritation may occur as with exposure to large amount of any non-toxic dust.
 Eye None currently known.
 Skin None currently known.
 Chronic Effects Prolonged inhalation of excessive dusts may cause lung damage. Use of this products, as intended, does not result in inhalation of excessive dust.
 Environmental Hazards No data is available on the adverse effects of this product on the environment.
Specific Hazards Dust explosion(like most finely divided organic powders).

Section 4. First Aid Measures

Inhalation	Remove from exposure to fresh air. Seek medical treatment.
Skin Contact	Wash with soap and water. If irritation does occur, seek medical treatment.
Eye Contact	Do not rub eyes. Flush thoroughly with water and seek medical treatment. Do not attempt to manually remove anything stuck to eye(s).
Ingestion	Wash out mouth with water. Drink several glasses of water. Ingestion is not applicable route of entry for intended use. If irritation or discomfort occurs, seek medical treatment immediately.

Section 5. Fire Fighting Measures

Extinguishing Media	CO ₂ , water, spray, foam and Dry Chemical.
Extinguishing Media To Avoid	Full water jet.
Fire and Explosion Hazards	If dispersed in the air, like most finely divided organic powders, may form an explosive mixture.
Protection of Firefighters	Use self-contained breathing apparatus (SCBA).

Section 6. Accidental Release Measures

Personal Precautions	No special precaution.
Environmental Precautions	No special precaution.
Method for Cleaning Up	Wear personal protective equipment(See Section 8). Vacuum or sweep material and place in a bag and hold for waste disposal. Use vacuum equipped with High Efficiency Particulate Air (HEPA) filter. Vacuum should be electrically bonded and grounded to dispel static electricity. To avoid dust generation, do not sweep dry.

Section 7. Handling and Storage

Handling	
Technical Measures	None
Precautions	Do not breathe dust. Avoid contact with eyes.
Safe Handling Advice	Try not to disperse the particles.
Storage	
Technical Measures	None
Storage Conditions	Keep container closed. Store in a cool and dry place. Keep out of reach of children.
Incompatible Products	None
Packing Materials	Bottles or Cartridge designated by Kyocera Mita.

Section 8. Exposure Controls/Personal Protection

Engineering Measures									
Ventilation	None required with intended use.								
Control Parameters (As total dust)	<table border="0"> <tr> <td>OSHA-PEL</td> <td>15mg/m³</td> <td>ACGIH-TLV(USA)</td> <td>10mg/m³</td> </tr> <tr> <td>DFG-MAK (GER)</td> <td>4mg/m³</td> <td>Worksafe-TWA(Austl.)</td> <td>10mg/m³</td> </tr> </table>	OSHA-PEL	15mg/m ³	ACGIH-TLV(USA)	10mg/m ³	DFG-MAK (GER)	4mg/m ³	Worksafe-TWA(Austl.)	10mg/m ³
OSHA-PEL	15mg/m ³	ACGIH-TLV(USA)	10mg/m ³						
DFG-MAK (GER)	4mg/m ³	Worksafe-TWA(Austl.)	10mg/m ³						
Personal Protection Equipment(s)	None required under normal use. For use other than normal customer-operating procedures (such as in the event of a large spill), goggles and respirators may be required.								
Hygiene Measures	Wash hands after handling.								

Section 9. Physical and Chemical Properties

Appearance	Solid, Blue fine powder
Odor	Almost odorless
Particle Size	30 μ m
PH/Boiling Point	Not applicable
Melting Point	No data available
Softening Point	125°C
Flash Point	Not applicable
Ignition Temperature	No data available
Explosion Properties	No data available
Vapor Pressure	Not applicable
Density (g/cm ³)	1.2
Solubility in water	Insoluble in water.
Partition Coefficient (n-Octanol/Water)	Not applicable

Section 10. Stability and Reactivity

Stability/Reactivity	Stable except above 200°C (392F).
Hazardous Reactions	Dust explosion, like most finely divided organic powders.
Conditions to avoid	Electric discharge, throwing into fire.
Materials to avoid	Oxidizing materials.
Hazardous Decomposition Products	CO, CO ₂ , NO _x and smoke.
Hazardous Polymerization	Will not occur.

Section 11. Toxicological Information

Acute toxicity

Inhalation, LC ₅₀ (mg/l)	No data available.
Ingestion(oral), LD ₅₀ (mg/kg)	>2,000(rat)(Based on data for other products with similar ingredients.)
Dermal, LD ₅₀ (mg/kg)	No data available.
Eye irritation	No data available.
Skin irritation	Mild irritant(rabbit)(Based on data for other products with similar ingredients.)
Skin sensitization	Non sensitizater(guinea pig)(Based on data for other products with similar ingredients.)
Mutagenicity	Ames Test is Negative.(Based on data for other products with similar ingredients.)

Chronic Toxicity or Long Term Toxicity

Prolonged inhalation of excessive dust may cause lung damage. It is attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. Use of this product, as intended, does not result in the inhalation of excessive dust.

In a study in rats by chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of the rats in the high concentration (16mg/m³) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animal in the middle (4mg/m³) exposure group. But no pulmonary change was reported in the lowest (1mg/m³) exposure group, the most relevant level to potential human exposures.

Carcinogenicity

IARC Monographs	Not Listed
NTP (USA)	Not Listed
OSHA Regulated(US/	Not Listed

Section 12. Ecological Information

No data is available on the adverse effects of this material on the environment.

Ecotoxicity	No data available
Mobility	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available

Section 13. Disposal Considerations

Method of Disposal	Dispose/incinerate in accordance with local, state and federal regulations. Do not throw toner cartridge or toner into an open flame. The hot toner may scatter and cause burns or other damage.
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Section 14. Transport Information

Information on Code and Classifications According to International Regulations	
UN Classification	None

Section 15. Regulatory Information

<u>US Information</u>	Information on the label not required.
TSCA (Toxic Substances Control Act)	All chemical substances in this product comply with all applicable rules or order under TSCA.
California Proposition 65	Ingredient carbon black subject to California Proposition 65 is bound in polymer-matrices so that warnings are not required.
<u>EU Information</u>	Information on the label (1999/45/EC and 67/548/EEC) not required.
Article 14 (2.1) of Directive 1999/45/EC is not applicable to this product.	

Section 16. Other Information

NFPA HAZARD RATING: The National Fire Protection Agency (USA)
Health: 1 Flammability: 1 Reactivity: 0

HMIS RATING: The National Paint and Coating Association (USA)
Health: 1 Flammability: 1 Reactivity: 0

Recommended Uses Toner for Electrophotographic Equipment

Literature References:

- ANSI Z400.1-1993, ISO 11014-1; Comission Directive 91/155/EEC
- IARC(1996) IARC monographs on the Evaluation of the Carcinogenic Risk of chemicals to Humans, Vol. 65, Printing Process and Printing Inks, Carbon Black and Some Nitro Compounds, Lyon, pp. 149-261.

H. Muhle, B.Bellmann, O.Creutzenberg, C. Dasenbrock, H. Ernst, R. Kilpper, J.C. MacKenzie, P.Morrow, U. Mohr, S. Takenaka, and R. Mermelstein(1991)
Fundamental and Applied Toxicology 17, pp.280-299.
Pulmonary Response to Toner upon Chronic inhalation Exposure in Rats.

Information on this data sheet represents our current data and the best opinion as to the proper use in handling of this product under normal conditions specified in our User's Manual. However, neither Kyocera Mita Corporation nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we do not guarantee that these are the only hazards which exist.

End of MSDS

Section 1. Chemical Product and Company Identification

Product Name **Magenta Developer For KM-C2230**
Manufacturer Kyocera Mita Corporation
Address Kyocera Mita America, Inc.
 225 Sand Road
 Fairfield, NJ 07004
Telephone Number (973)-808-8444
Date February 02, 2005

Section 2. Composition/Information on Ingredients

Hazardous Components (Chemical Identity, Common Name/s)	OSHA PEL	ACGIH TLV	NOHSC	%
(CAS No. 1344-43-0) Manganese oxide	5mg/m ³	0.2mg/m ³		1-10
(Non Hazardous Ingredients)				
(CAS No. 1309-37-1) Ferrite Iron oxide	Not listed	Not listed	Not listed	40-50
(CAS No. 1309-48-4) Magnesium oxide	Not listed	Not listed	Not listed	30-40
Styrene-acrylic resin	Not listed	Not listed	Not listed	1-10
Acrylic resin	Not listed	Not listed	Not listed	1-10

Manganese oxide(CAS No. 1344-43-0)
 Worksafe-TWA(Austl): 1mg/m³

Section 3. Hazards Identification

Emergency Overview Magenta powder (mean dia. Is about 30µm by volume). Almost odorless.
Classification Not classified as dangerous.(1999/45/EC)
Most Important Hazards and Effects of the Products
 Ingestion None currently known.
 Inhalation None currently known. Minimal respiratory tract irritation may occur as with exposure to large amount of any non-toxic dust.
 Eye None currently known.
 Skin None currently known.
Chronic Effects Prolonged inhalation of excessive dusts may cause lung damage. Use of this products, as intended, does not result in inhalation of excessive dust.
Environmental Hazards No data is available on the adverse effects of this product on the environment.
Specific Hazards Dust explosion(like most finely divided organic powders).

Section 4. First Aid Measures

Inhalation	Remove from exposure to fresh air. Seek medical treatment.
Skin Contact	Wash with soap and water. If irritation does occur, seek medical treatment.
Eye Contact	Do not rub eyes. Flush thoroughly with water and seek medical treatment. Do not attempt to manually remove anything stuck to eye(s).
Ingestion	Wash out mouth with water. Drink several glasses of water. Ingestion is not applicable route of entry for intended use. If irritation or discomfort occurs, seek medical treatment immediately.

Section 5. Fire Fighting Measures

Extinguishing Media	CO ₂ , water, spray, foam and Dry Chemical.
Extinguishing Media To Avoid	Full water jet.
Fire and Explosion Hazards	If dispersed in the air, like most finely divided organic powders, may form an explosive mixture.
Protection of Firefighters	Use self-contained breathing apparatus (SCBA).

Section 6. Accidental Release Measures

Personal Precautions	No special precaution.
Environmental Precautions	No special precaution.
Method for Cleaning Up	Wear person protective equipment(See Section 8). Vacuum or sweep material and place in a bag and hold for waste disposal. Use vacuum equipped with High Efficiency Particulate Air (HEPA) filter. Vacuum should be electrically bonded and grounded to dispel static electricity. To avoid dust generation, do not sweep dry.

Section 7. Handling and Storage

Handling	
Technical Measures	None
Precautions	Do not breathe dust. Avoid contact with eyes.
Safe Handling Advice	Try not to disperse the particles.
Storage	
Technical Measures	None
Storage Conditions	Keep container closed. Store in a cool and dry place. Keep out of reach of children.
Incompatible Products	None
Packing Materials	Bottles or Cartridge designated by Kyocera Mita.

Section 8. Exposure Controls/Personal Protection

Engineering Measures	
Ventilation	None required with intended use.
Control Parameters (As total dust)	OSHA-PEL 15mg/m ³ ACGIH-TLV(USA) 10mg/m ³ DFG-MAK (GER) 4mg/m ³ Worksafe-TWA(Austl.) 10mg/m ³
Personal Protection Equipment(s)	None required under normal use. For use other than normal customer-operating procedures (such as in the event of a large spill), goggles and respirators may be required.
Hygiene Measures	Wash hands after handling.

Section 9. Physical and Chemical Properties

Appearance	Solid, Magenta fine powder
Odor	Almost odorless
Particle Size	30µm
PH/Boiling Point	Not applicable
Melting Point	No data available
Softening Point	125°C
Flash Point	Not applicable
Ignition Temperature	No data available
Explosion Properties	No data available
Vapor Pressure	Not applicable
Density (g/cm ³)	1.2
Solubility in water	Insoluble in water
Oxidizing Properties	No data available
Partition Coefficient (n-Octanol/Water)	Not applicable

Section 10. Stability and Reactivity

Stability/Reactivity	Stable except above 200°C (392F).
Hazardous Reactions	Dust explosion, like most finely divided organic powders.
Conditions to avoid	Electric discharge, throwing into fire.
Materials to avoid	Oxidizing materials.
Hazardous Decomposition Products	CO, CO ₂ , No _x and smoke.
Hazardous Polymerization	Will not occur.

Section 11. Toxicological Information

Acute toxicity

Inhalation, LC ₅₀ (mg/l)	No data available.
Ingestion(oral), LD ₅₀ (mg/kg)	>2,000(rat)(Based on data for other products with similar ingredients.)
Dermal, LD ₅₀ (mg/kg)	No data available.
Eye irritation	No data available.
Skin irritation	Mild irritant(rabbit)(Based on data for other products with similar ingredients.)
Skin sensitization	Non sensitizater(guinea pig)(Based on data for other products with similar ingredients.)
Mutagenicity	Ames Test is Negative.(Based on data for other products with similar ingredients.)

Chronic Toxicity or Long Term Toxicity

Prolonged inhalation of excessive dust may cause lung damage. It is attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. Use of this product, as intended, does not result in the inhalation of excessive dust.

In a study in rats by chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of the rats in the high concentration (16mg/m³) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animal in the middle (4mg/m³) exposure group. But no pulmonary change was reported in the lowest (1mg/m³) exposure group, the most relevant level to potential human exposures.

Carcinogenicity

IARC Monographs	Not Listed
NTP (USA)	Not Listed
OSHA Regulated(US/	Not Listed

Section 12. Ecological Information

No data is available on the adverse effects of this material on the environment.

Ecotoxicity	No data available
Mobility	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available

Section 13. Disposal Considerations

Method of Disposal	Dispose/incinerate in accordance with local, state and federal regulations. Do not throw toner cartridge or toner into an open flame. The hot toner may scatter and cause burns or other damage.
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Section 14. Transport Information

Information on Code and Classifications According to International Regulations	
UN Classification	None

Section 15. Regulatory Information

<u>US Information</u>	Information on the label not required.
TSCA (Toxic Substances Control Act)	All chemical substances in this product comply with all applicable rules or order under TSCA.
California Proposition 65	This product contains no chemical substances subject to California Proposition 65.

<u>EU Information</u>	Information on the label (1999/45/EC and 67/548/EEC) not required.
Article 14 (2.1) of Directive 1999/45/EC is not applicable to this product.	

Section 16. Other Information

NFPA HAZARD RATING: The National Fire Protection Agency (USA)
Health: 1 Flammability: 1 Reactivity: 0

HMIS RATING: The National Paint and Coating Association (USA)
Health: 1 Flammability: 1 Reactivity: 0

Recommended Uses Developer for Electrophotographic Equipment

Literature References:

ANSI Z400.1-1993, ISO 11014-1; Commission Directive 91/155/EEC

H. Muhle, B. Bellmann, O. Creutzenberg, C. Dasenbrock, H. Ernst, R. Kilpper, J.C. MacKenzie, P. Morrow, U. Mohr, S. Takenaka, and R. Mermelstein (1991)
Fundamental and Applied Toxicology 17, pp.280-299.
Pulmonary Response to Toner upon Chronic inhalation Exposure in Rats.

Information on this data sheet represents our current data and the best opinion as to the proper use in handling of this product under normal conditions specified in our User's Manual. However, neither Kyocera Mita Corporation nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we do not guarantee that these are the only hazards which exist.

End of MSDS

Section 1. Chemical Product and Company Identification

Product Name **Yellow Developer For KM-C2230**
Manufacturer Kyocera Mita Corporation
Address Kyocera Mita America, Inc.
 225 Sand Road
 Fairfield, NJ 07004
Telephone Number (973)-808-8444
Date February 02, 2005

Section 2. Composition/Information on Ingredients

Hazardous Components (Chemical Identity, Common Name/s)	OSHA PEL	ACGIH TLV	NOHSC	%
(CAS No. 1344-43-0) Manganese oxide	5mg/m ³	0.2mg/ ³		1-10
(Non Hazardous Ingredients)				
(CAS No. 1309-37-1) Ferrite Iron oxide	Not listed	Not listed	Not listed	40-50
(CAS No. 1309-48-4) Magnesium oxide	Not listed	Not listed	Not listed	30-40
Styrene-acrylic resin	Not listed	Not listed	Not listed	1-10
Acrylic resin	Not listed	Not listed	Not listed	1-10

Manganese oxide(CAS No. 1344-43-0)

Worksafe-TWA(Austl): 1mg/m³

Section 3. Hazards Identification

Emergency Overview Yellow powder (mean dia. Is about 30µm by volume). Almost odorless.
Classification Not classified as dangerous.(1999/45/EC)
Most Important Hazards and Effects of the Products
 Ingestion None currently known.
 Inhalation None currently known. Minimal respiratory tract irritation may occur as with exposure to large amount of any non-toxic dust.
 Eye None currently known.
 Skin None currently known.
Chronic Effects Prolonged inhalation of excessive dusts may cause lung damage. Use of this products, as intended, does not result in inhalation of excessive dust.
Environmental Hazards No data is available on the adverse effects of this product on the environment.
Specific Hazards Dust explosion(like most finely divided organic powders).

Section 4. First Aid Measures

Inhalation	Remove from exposure to fresh air. Seek medical treatment.
Skin Contact	Wash with soap and water. If irritation does occur, seek medical treatment.
Eye Contact	Do not rub eyes. Flush thoroughly with water and seek medical treatment. Do not attempt to manually remove anything stuck to eye(s).
Ingestion	Wash out mouth with water. Drink several glasses of water. Ingestion is not applicable route of entry for intended use. If irritation or discomfort occurs, seek medical treatment immediately.

Section 5. Fire Fighting Measures

Extinguishing Media	CO ₂ , water, spray, foam and Dry Chemical.
Extinguishing Media To Avoid	Full water jet.
Fire and Explosion Hazards	If dispersed in the air, like most finely divided organic powders, may form an explosive mixture.
Protection of Firefighters	Use self-contained breathing apparatus (SCBA).

Section 6. Accidental Release Measures

Personal Precautions	No special precaution.
Environmental Precautions	No special precaution.
Method for Cleaning Up	Wear person protective equipment(See Section 8). Vacuum or sweep material and place in a bag and hold for waste disposal. Use vacuum equipped with High Efficiency Particulate Air (HEPA) filter. Vacuum should be electrically bonded and grounded to dispel static electricity. To avoid dust generation, do not sweep dry.

Section 7. Handling and Storage

Handling	
Technical Measures	None
Precautions	Do not breathe dust. Avoid contact with eyes.
Safe Handling Advice	Try not to disperse the particles.
Storage	
Technical Measures	None
Storage Conditions	Keep container closed. Store in a cool and dry place. Keep out of reach of children.
Incompatible Products	None
Packing Materials	Bottles or Cartridge designated by Kyocera Mita.

Section 8. Exposure Controls/Personal Protection

Engineering Measures									
Ventilation	None required with intended use.								
Control Parameters (As total dust)	<table border="0" style="display: inline-table; vertical-align: top;"> <tr> <td>OSHA-PEL</td> <td>15mg/m³</td> <td>ACGIH-TLV(USA)</td> <td>10mg/m³</td> </tr> <tr> <td>DFG-MAK (GER)</td> <td>4mg/m³</td> <td>Worksafe-TWA(Austl.)</td> <td>10mg/m³</td> </tr> </table>	OSHA-PEL	15mg/m ³	ACGIH-TLV(USA)	10mg/m ³	DFG-MAK (GER)	4mg/m ³	Worksafe-TWA(Austl.)	10mg/m ³
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DFG-MAK (GER)	4mg/m ³	Worksafe-TWA(Austl.)	10mg/m ³						
Personal Protection Equipment(s)	None required under normal use. For use other than normal customer-operating procedures (such as in the event of a large spill), goggles and respirators may be required.								
Hygiene Measures	Wash hands after handling.								

Section 9. Physical and Chemical Properties

Appearance	Solid, Yellow fine powder
Odor	Almost odorless
Particle Size	Mean dia. is about 30 μ m by volume
PH/Boiling Point	Not applicable
Melting Point	No data available
Softening Point	125°C
Flash Point	Not applicable
Ignition Temperature	No data available
Explosion Properties	No data available
Vapor Pressure	Not applicable
Density (g/cm ³)	5.0
Solubility in water	Insoluble in water
Partition Coefficient (n-Octanol/Water)	Not applicable

Section 10. Stability and Reactivity

Stability/Reactivity	Stable except above 200°C (392F).
Hazardous Reactions	Dust explosion, like most finely divided organic powders.
Conditions to avoid	Electric discharge, throwing into fire.
Materials to avoid	Oxidizing materials.
Hazardous Decomposition Products	CO, CO ₂ , NO _x and smoke.
Hazardous Polymerization	Will not occur.

Section 11. Toxicological Information

Acute toxicity

Inhalation, LC ₅₀ (mg/l)	No data available.
Ingestion(oral), LD ₅₀ (mg/kg)	>2,000(rat)(Based on data for other products with similar ingredients.)
Dermal, LD ₅₀ (mg/kg)	No data available.
Eye irritation	No data available.
Skin irritation	Mild-irritant(rabbit)(Based on data for other products with similar ingredients.)
Skin sensitization	Non sensitizater(guinea pig)(Based on data for other products with similar ingredients.)
Mutagenicity	Ames Test is Negative.(Based on data for other products with similar ingredients.)

Chronic Toxicity or Long Term Toxicity

Prolonged inhalation of excessive dust may cause lung damage. It is attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. Use of this product, as intended, does not result in the inhalation of excessive dust.

In a study in rats by chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of the rats in the high concentration (16mg/m³) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animal in the middle (4mg/m³) exposure group. But no pulmonary change was reported in the lowest (1mg/m³) exposure group, the most relevant level to potential human exposures.

Carcinogenicity

IARC Monographs	Not Listed
NTP (USA)	Not Listed
OSHA Regulated(US/	Not Listed

Section 12. Ecological Information

No data is available on the adverse effects of this material on the environment.

Ecotoxicity	No data available
Mobility	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available

Section 13. Disposal Considerations

Method of Disposal Dispose/incinerate in accordance with local, state and federal regulations.
Do not throw toner cartridge or toner into an open flame. The hot toner may scatter and cause burns or other damage.

Section 14. Transport Information

Information on Code and Classifications According to International Regulations
UN Classification None

Section 15. Regulatory Information

US Information Information on the label not required.
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California Proposition 65 This product contains no chemical substances subject to California Propostion 65
EU Information Information on the label (1999/45/EC and 67/548/EEC) not required.
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