MATERIAL SAFETY DATA SHEET

Section 1. Chemical Product and Company Identification

Product Name	**Black Toner For CS-1205,1415,1435,2054,2085**
Manufacturer	Kyocera Mita Corporation
Address	COPYSTAR, A DIVISION OF Kyocera Mita America, Inc. 225 Sand Road Fairfield, NJ 07004
Telephone Number	(973)-808-8444
Date	February 16, 2001

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	3.0mg/m^3	5-10
(Non Hazardous Ingredients)				
Styrene acrylate copolymer	Not listed	Not listed	Not listed	80-90
Polypropylene	Not listed	Not listed	Not listed	1-5

Section 3. Hazards Identification

Potential Health Effects

Ingestion	Ingestion is not applicable route of entry for intended use.
Inhalation	Prolonged inhalation of excessive dusts may cause lung damage. Use of this product, as intended, does not result in inhalation of excessive dusts.
Eye Contact	May cause eye irritation.
Skin Contact	Unlikely to cause skin irritation.

Section 4. First Aid Measures

First Aid Measures

Ingestion	Dilute stomach contents with several glasses of water and seek medical treatment.
Inhalation	Remove from exposure to fresh air.
Eye Contact	Flush thoroughly with water and seek medical treatment
Skin Contact	Wash with soap and water.

MATERIAL SAFETY DATA SHEET

Section 5. Fire Fighting Measures

Extinguishing Media	Water, Foam, CO_2 or Dry Chemical.
Special Fire Fighting Procedures	Use self-contained breathing apparatus and protective gear in case of burning in large quantities.
Unusual Fire and Explosion Hazards	None under normal storage and use conditions.

Section 6. Accidental Release Measures

Personal Precautions	No special precaution.
Environmental Precautions	No special precaution.
Method for Cleaning Up	Clean up with a vacuum cleaner with a .5 micron filter or smaller.

Section 7. Handling and Storage

Handling	Avoid inhalation, ingestion, skin or eye contact. Keep away from children.
Storage	Store in a cool, dry and dark place.

Section 8. Exposure Controls/Personal Protection

Exposure Guidelines	See Section 2
Engineering Controls	None
Personal Protection Equipment(s)	
Respiratory Protection	None required under normal use.
Eye/Face Protection	None required under normal use.
Skin Protection	None required under normal use.

Section 9. Physical and Chemical Properties

Appearance	Black fine powder
Odor	Odorless
pH	N.A.
Boiling Point	N.A.
Melting Point	144
Decomposition Temperature	No data available
Flash Point	No data available
Flammable (explosive) Limits	No data available
Autoignition Temperature	N.A.
Flammability	No data available
Explosive Properties	No data available
Oxidizing Properties	N.A.
Vapor Pressure	N.A.
Vapor Density	N.A.
Density/Specific Gravity	1.1(H_20=1)
Water Solubility	Insoluble
Fat Solubility	No data available
Partition Coefficient (n-Octanol/Water)	No data available
Percent Volatile	N.A.
Evaporation Rate	N.A.

MATERIAL SAFETY DATA SHEET

Section 10. Stability and Reactivity

Stability	Stable
Conditions to avoid	None
Materials to Avoid	Strong oxidizers, Organic solvent
Hazardous Decomposition Products	None
Hazardous Polymerization	Will Not Occur
Conditions to avoid	None

Section 11. Toxicological Information

Acute oral toxicity	(rat)LD_{50}>2,000mg/kg(Estimated from other products containing same materials.)
Acute dermal toxicity	(rat)LD_{50}>2,000mg/kg(Estimated from other products containing same materials.)
Acute inhalation toxicity	(rat)LC_{50}(4hr)>5.46mg/l(Estimated from other products containing same materials.)
Acute eye irritation	(rabbit) Mild-irritant(Estimated from other products containing same materials.)
Acute skin irritation	(rabbit) Non-irritant(Estimated from other products containing same materials.)
Skin sensitization	(guinea pig)0% sensitization rate. (Estimated from other products containing same materials.)
Mutagenicity	Ames Test is Negative.
Reproductive Toxicity	No reproductive toxicant, according to MAK, Proposition 65, TRGS905 and EU Directive.
Carcinogenicity	No carcinogen or potential carcinogen (except carbon black), according to IARC, Japan Association on Industrial Health, ACGIH, EPA, OSHA, NTP, ILO, MAK, Proposition 65, TRGS 905 and EU Directive.

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.

Chronic effects:

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.

Others NONE

Section 12. Ecological Information

Mobility	No data available.
Persistence Degradability	No data available.
Bioaccumulation	No data available.
Ecotoxicity	No data available.
Other Adverse Effects	No data available.

Section 13. Disposal Considerations

Method of Disposal	Dispose in accordance with local, state and federal regulations. Do not incinerate toner and toner containers. Dangerous sparks may cause burn.

Section 14. Transport Information

UN No.	None.
UN Shipping Name	None.
UN Classification	None.
UN Packing Group	None.
Special Precautions	None.

Section 15. Regulatory Information

Label information according to the Directives 88/379/EEC and 67/548/EEC(EU)

Symbol and Indication	Not required.
R-Phrase	Not required.
S-Phrase	Not required.
Dangerous Component (s)	None.
Other	None.

Section 16. Other Information

To the best of our knowledge, the information contained herein is accurate. However, we cannot assume any liability whatsoever for the accuracy or completeness of the information contained herein.

End of MSDS

MATERIAL SAFETY DATA SHEET

Section 1. Chemical Product and Company Identification

Product Name	**Black Developer For CS-1205,1415,1435,2054,2086**
Manufacturer	Kyocera Mita Corporation
Address	COPYSTAR, A DIVISION OF Kyocera Mita America, Inc. 225 Sand Road Fairfield, NJ 07004
Telephone Number	(973)-808-8444
Date	February 16, 2001

Section 2. Composition/Information on Ingredients

Hazardous Components (Chemical Identity, Common Name/s)		*OSHA PEL*	*ACGIH TLV*	*NOHSC*	*%*
(CAS No. 1309-37-1)	Iron Oxide	Not listed	5mg/m^3	Not listed	60-70
(CAS No. 1314-13-2)	Zinc Oxide	15mg/m^3	10mg/m^3	10mg/m^3	10-15
(CAS No. 1344-43-0)	Maganese oxide	5mg/m^3	0.2mg/m^3	5mg/m^3	1-5
(CAS No. 1305-78-8)	Calcium oxide	5mg/m^3	2mg/m^3	2mg/m^3	1-5
(CAS No. 1333-86-4)	Carbon black	3.5mg/m^3	3.5mg/m^3	3.0mg/m^3	<1
(Non Hazardous Ingredients)					
Copper Oxide		Not listed	Not listed	Not listed	10-15

Section 3. Hazards Identification

Potential Health Effects

Ingestion	Ingestion is not applicable route of entry for intended use.
Inhalation	Prolonged inhalation of excessive dusts may cause lung damage. Use of this product, as intended, does not result in inhalation of excessive dusts.
Eye Contact	May cause eye irritation.
Skin Contact	Unlikely to cause skin irritation.

Section 4. First Aid Measures

First Aid Measures

Ingestion	Dilute stomach contents with several glasses of water and seek medical treatment.
Inhalation	Remove from exposure to fresh air.
Eye Contact	Flush thoroughly with water and seek medical treatment
Skin Contact	Wash with soap and water.

MATERIAL SAFETY DATA SHEET

Section 5. Fire Fighting Measures

Extinguishing Media	Water, Foam, CO_2 or Dry Chemical.
Special Fire Fighting Procedures	Use self-contained breathing apparatus and protective gear in case of burning in large quantities.
Unusual Fire and Explosion Hazards	None under normal storage and use conditions.

Section 6. Accidental Release Measures

Personal Precautions	No special precaution.
Environmental Precautions	No special precaution.
Method for Cleaning Up	Clean up with a vacuum cleaner with a .5 micron filter or smaller.

Section 7. Handling and Storage

Handling	Avoid inhalation, ingestion, skin or eye contact. Keep away from children.
Storage	Store in a cool, dry and dark place.

Section 8. Exposure Controls/Personal Protection

Exposure Guidelines	See Section 2
Engineering Controls	None
Personal Protection Equipment(s)	
Respiratory Protection	None required under normal use.
Eye/Face Protection	None required under normal use.
Skin Protection	None required under normal use.

Section 9. Physical and Chemical Properties

Appearance	Black fine powder
Odor	Odorless
pH	N.A.
Boiling Point	N.A.
Melting Point	1400
Decomposition Temperature	No data available
Flash Point	N.A.
Flammable (explosive) Limits	N.A.
Autoignition Temperature	N.A.
Flammability	N.A.
Explosive Properties	N.A.
Oxidizing Properties	N.A.
Vapor Pressure	N.A.
Vapor Density	N.A.
Density/Specific Gravity	5.2(H_20=1)
Water Solubility	Insoluble
Fat Solubility	N.A.
Partition Coefficient (n-Octanol/Water)	N.A.
Percent Volatile	N.A.
Evaporation Rate	N.A.

MATERIAL SAFETY DATA SHEET

Section 10. Stability and Reactivity

Stability	Stable
Conditions to avoid	None
Materials to Avoid	Strong oxidizers, Organic solvent
Hazardous Decomposition Products	None
Hazardous Polymerization	Will Not Occur
Conditions to avoid	None

Section 11. Toxicological Information

Acute oral toxicity	(rat)LD_{50}>5,000mg/kg.
Acute dermal toxicity	(rat)LD_{50}>2,000mg/kg [Toner](Estimated from other products containing same materials.)
Acute inhalation toxicity	(rat)LC_{50}(4hr)>5.46mg/l[Toner](Estimated from other products containing same materials.)
Acute eye irritation	(rabbit) Mild irritant[Toner](Estimated from other products containing same materials.)
Acute skin irritation	(rabbit) Non-irritant.
Skin sensitization	(guinea pig) 0% sensitization rate.
Mutagenicity	Ames Test is Negative.
Reproductive Toxicity	No reproductive toxicant, according to MAK, Proposition 65, TRGS 905 and EU Directive.
Carcinogenicity	No carcinogen or potential carcinogen (except carbon black), according to IARC, Japan Association on Industrial Health, ACGIH, EPA, OSHA, NTP, ILO, MAK, Proposition 65, TRGS 905 and EU Directive.

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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.

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Others NONE

MATERIAL SAFETY DATA SHEET

Section 12. Ecological Information

Mobility	No data available.
Persistence Degradability	No data available.
Bioaccumulation	No data available.
Ecotoxicity	No data available.
Other Adverse Effects	No data available.

Section 13. Disposal Considerations

Method of Disposal	Dispose in accordance with local, state and federal regulations. Do not incinerate toner and toner containers. Dangerous sparks may cause burn.

Section 14. Transport Information

UN No.	None.
UN Shipping Name	None.
UN Classification	None.
UN Packing Group	None.
Special Precautions	None.

Section 15. Regulatory Information

Label information according to the Directives 88/379/EEC and 67/548/EEC(EU)

Symbol and Indication	Not required.
R-Phrase	Not required.
S-Phrase	Not required.
Dangerous Component (s)	None.
Other	None.

Section 16. Other Information

To the best of our knowledge, the information contained herein is accurate. However, we cannot assume any liability whatsoever for the accuracy or completeness of the information contained herein.

End of MSDS