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Material Safety Data Sheet

Page: 1 of 3

MSDS No.: 021-000907

Date : 18 August, 2008

SECTION 1 PRODUCT IDENTIFICATION

Product Name : Toner of Toner Cartridge UG-5580 & UG-5585 for Panasonic Facsimile machines Models UF-6200 & UF-5960

Product No. : Toner for Toner Cartridge UG-5580 & UG-5585

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS (Common Name)	CAS #	PROPORTION (% by wt.)	OSHA PEL	ACGIH TLV	OTHER LIMITS
• Polystyrene Acrylate copolymer		> 54.0	None established	None established	None
• Iron oxide	1317-61-9	< 40.0	None established	None established	None
• Polypropylene		< 4.0	None established	None established	None
• Organic pigment		< 1.0	None established	None established	None
• Amorphous silica*		< 1.0	20mppcf	10.0 mg/m ³	None

Ethanol, 2-ethoxy- [CAS # 110-80-5] contained less than 0.01wt% in this product.

*:See [Section 15]

SECTION 3 HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW :

Odorless black fine powder.

Not a highly flammable, but when suspended in air, is combustible as with most organic powders.

POTENTIAL HEALTH EFFECTS :

EYES : Solid or dusts may cause irritation or corneal injury.

SKIN CONTACT : Essentially nonirritating to skin.

SKIN ABSORPTION : Skin absorption is unlikely due to physical properties.

INGESTION : Oral toxicity is believed to be low.

INHALATION : Minimal irritation to respiratory track may occur.

FIRE AND EXPLOSION :

SENSITIVITY TO MECHANICAL IMPACT : None

SENSITIVITY TO STATIC CHARGE : None

SECTION 4 FIRST AID MEASURES

EYES : Flush eyes immediately with plenty of water for at least 15 minutes.
SKIN : Flush with plenty of water. Use soap.
INGESTION : No adverse effects anticipated by this route of exposure incidental to proper handling.
INHALATION : Remove to fresh air. If effects occur, consult medical personnel.

SECTION 5 FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES :
FLASH POINT : No data available
FLAMMABLE LIMITS
Explosion Limits(Upper): No data available
Explosion Limits(Lower): No data available
EXTINGUISHING MEDIA : Water fog, foam, CO₂, dry chemical.
FIRE-FIGHTING EQUIPMENT : Wear full bunker gear including a positive pressure self-contained breathing apparatus in case of burning in large quantities.

SECTION 6 ACCIDENTIAL RELEASE MEASURES

Minimize the release of particulates. Wear personal protective equipment.
Do not use vacuum cleaner.
After by lightly spraying with water to prevent development of dust, spills should be swept up or wiped up. Then residuals can be removed with soap and water. Preferred to use the material in a place, covering up the floor and surrounding matters with suitable sheets such as paper, in a case of being not fit to scrub the floor with water. These used sheets should be wrapped up in spills and transfer into a suitable container for disposal.
Garments may be washed or dry cleaned, after removal of loose toner.

SECTION 7 HANDLING AND STORAGE

Avoid creating dust. Clean up all spills promptly.
Inhalation and contact with skin or eyes should be avoided.
Provide general ventilation. Good general ventilation should be sufficient for most conditions.
Store in cool, well ventilated place away from flames and spark-producing equipment. May toners be preferred to use or to handle at the suitable place without concerning about smudges to which are given rise by releasing them.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES : ACGIH TLV= 10mg/m³(Total dust), 3mg/m³(Respirable dust)
OSHA PEL= 15mg/m³(Total dust), 5mg/m³(Respirable dust)
RESPIRATORY PROTECTION : For most conditions, no respiratory protection should be needed; however, in dusty atmospheres, use an approved dust respirator.
SKIN PROTECTION : No precautions should be needed under normal use.
EYE PROTECTION : No precautions should be needed under normal use.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE : Black fine powder
ODOR : Odorless
BOILING POINT (°C): Not applicable
VAPOR PRESSURE (mg Hg.): Not applicable
VAPOR DENSITY (AIR = 1): Not applicable
SOLUBILITY IN WATER : Negligible
SPECIFIC GRAVITY (H₂O=1): ca. 1.6
MELTING POINT (°C): No data available
pH : Not applicable
PERCENT VOLATILE : Not applicable

SECTION 10 STABILITY AND REACTIVITY

STABILITY : This is a stable product.
INCOMPATIBILITY : (SPECIAL MATERIALS TO AVOID)
Strong oxidizers.
HAZARDOUS DECOMPOSITION PRODUCTS : Carbon oxides, hydrocarbons (by high heat
and fire)
HAZARDOUS POLYMERIZATION : Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Mutagenicity : Negative in the Ames Test
Carcinogenicity : No data available
Chronic Effects : No data available

SECTION 12 ECOLOGICAL INFORMATION

None

SECTION 13 DISPOSAL CONSIDERATION

WASTE DISPOSAL METHOD : Waste must be disposed of in accordance with country
and local environmental control regulations.

SECTION 14 TRANSPORT INFORMATION

TRANSPORT INFORMATION : This is not a hazardous product.
UN No. : None allocated.

SECTION 15 REGULATORY INFORMATION

USA INFORMATION :
All chemical substances in this product comply with all applicable rules or
orders under TSCA.
SARA Title III Section 313 :
Organic pigment is regarded as Chromium compounds (category codes: N090).
AUSTRALIA INFORMATION :
Not classified as hazardous according to criteria of NOHSC.

SECTION 16 OTHER INFORMATION

NFPA rating : Health = 1, Flammability = 1, Reactivity = 0

Information on this data sheet represents our current data and best opinion as to the proper use
in handling of this product under normal conditions.

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Material Safety Data Sheet

Page: 1 of 3
MSDS No.: 021-000947

Date : 6 August, 2008

SECTION 1 PRODUCT IDENTIFICATION

Product Name : OPC Drum of Toner Cartridge UG-5580 & UG-5585 for Panasonic
Facsimile machines Models UF-6200 & UF-5960

Product No. : OPC Drum of Toner Cartridges UG-5580 & UG-5585

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS	CAS #	PROPORTION (% by wt.)	OSHA PEL	ACGIH TLV	OTHER LIMITS
♦ Aluminum alloy		94.0 - 98.0	None established	None established	None
♦ Titanium dioxide	13463-67-7	0.5 - 2.0	None established	None established	None
♦ Binder resin		0.5 - 2.0	None established	None established	None
♦ Organic semiconductor		0.3 - 0.8	None established	None established	None

SECTION 3 HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW : Greenish blue colored aluminum cylinder, with no odor.

POTENTIAL HEALTH EFFECTS :

EYE EFFECTS : Not applicable under intended use.

SKIN EFFECTS : No corroding or irritating effect is expected at usual
use as a photosensitive drum.

INGESTION EFFECTS : Not applicable under intended use.

INHALATION EFFECTS : Not applicable under intended use.

CHRONIC EFFECTS : Not identified.

MEDICAL CONDITIONS GENERALLY KNOWN TO BE AGGRAVATED BY EXPOSURE :
Not identified.

SECTION 4 FIRST AID MEASURES

EYE CONTACT : Flush with plenty of water

SKIN CONTACT : In case of contact, wash with soap and water.

INHALATION : If needed, get medical attention.

INGESTION : If needed, get medical attention.

NOTE TO PHYSICIANS : None

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA : Dry chemical, CO₂, Foam or water.
UNSUITABLE EXTINGUISHING MEDIA : None
SPECIAL FIRE FIGHTING PROCEDURES : None
UNUSUAL FIRE AND EXPLOSION HAZARDS : None
FLASH POINT (°C): Not applicable.
FLAMMABLE LIMITS : Not applicable.
AUTOIGNITION TEMPERATURE (°C): Not applicable.
FLAMMABILITY : Not applicable.
AUTOFLAMMABILITY : None
EXPLOSIVE PROPERTIES : None
OXIDIZING PROPERTIES : None
HAZARDOUS COMBUSTION PRODUCTS : CO, CO₂
OTHER PROPERTIES : None

SECTION 6 ACCIDENTIAL RELEASE MEASURES

METHOD FOR CLEANING UP : Not applicable under intended use.
PERSONAL PRECAUTIONS : Not applicable under intended use.
ENVIRONMENTAL PRECAUTIONS : Not applicable under intended use.

SECTION 7 HANDLING AND STORAGE

HANDLING : None of safe handling advice.
STORAGE : Keep at temperature not exceeding 45 °C.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES : None.
ENGINEERING CONTROLS : Not required.
RESPIRATORY PROTECTION : Not required.
SKIN PROTECTION : Not required.
EYE/FACE PROTECTION : Not required.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE : Greenish blue colored aluminum cylinder
ODOR : No odor
pH : Not applicable
BOILING POINT (°C): Not applicable
MELTING POINT (°C): 100 °C or higher
DECOMPOSITION TEMPERATURE (°C): No data available
VAPOR PRESSURE (mm Hg.) : Negligible
VAPOR DENSITY (AIR = 1) : Not applicable
DENSITY/ SPECIFIC GRAVITY (H₂O=1): No data available
SOLUBILITY IN WATER : Negligible
FAT SOLUBILITY : Partially soluble in ketones, esters and aromatic solvents
PARTITION COEFFICIENT (n-Octanol/water): Not soluble in water and n-octanol
PERCENT VOLATILE : Negligible
EVAPORATION RATE : Not applicable

SECTION 10 STABILITY AND REACTIVITY

STABILITY : This is a stable product.
MATERIALS TO AVOID : None
HAZARDOUS DECOMPOSITION PRODUCTS : None
HAZARDOUS POLYMERIZATION : Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

INHALATION : No data available.
INGESTION : LD50: >2000mg/Kg(rats) (Data from similar drum)
EYE : No data available.
SKIN : No data available.
SENSITIZATION : No data available.
MUTAGENICITY : Negative (Ames Test : Salmonella typhimurium)
(Data from similar drum)
REPRODUCTIVE TOXICITY : No data available.
CARCINOGENICITY : No human carcinogen or potential carcinogen, according
to IARC Monographs, NTP, OSHA(USA) regulation,
California Proposition 65 and EU Directive.
Others : None

SECTION 12 ECOLOGICAL INFORMATION

No information indicating any adverse ecological effects.

SECTION 13 DISPOSAL CONSIDERATION

Any disposal practice should be done under conditions, which meet local, state and federal laws and regulations relating to waste (contact local or state environmental agency for specific rules).

SECTION 14 TRANSPORT INFORMATION

UN # : None.
UN SHIPPING NAME : None.
UN CLASSIFICATION : None.
UN PACKING GROUP : None.
SPECIAL PRECAUTIONS : None.

SECTION 15 REGULATORY INFORMATION

TSCA : This product do not fall in the category of the regulations and orders of section 6 and 7 of TSCA (Toxic Substance Control Act).

SECTION 16 OTHER INFORMATION

None.

Information on this data sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions.

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Material Safety Data Sheet

Page: 1 of 3

MSDS No.: 021-000764

Date : 6 July, 2006

SECTION 1 PRODUCT IDENTIFICATION

Product Name : Toner, Toner Cartridge UG-5515 for Panasonic Facsimile machines
Model UF-5950

Product No. : Toner for Toner Cartridge UG-5515

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENTS</u> (Common Name)	<u>CAS #</u>	<u>PROPORTION</u> (% by wt.)	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>OTHER LIMITS</u>
♦ Styrene acrylate copolymer		> 56.0	None established	None established	None
♦ Iron oxide		< 40.0	None established	None established	None
♦ Polypropylene		< 4.0	None established	None established	None

SECTION 3 HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW : Fine black powder.

POTENTIAL HEALTH EFFECTS:

EYE EFFECTS : Mild irritant.

SKIN EFFECTS : None currently known.

INGESTION EFFECTS : May be harmful if swallowed.

INHALATION EFFECTS : Minimal respiratory tract irritation may occur as with exposure to large amounts of any non-toxic dust. May cause cough and rise phlegm.

CHRONIC EFFECTS : Not aware of any health effects associated with toner under its intended use.

CARCINOGENICITY : No NTP, No IARC Monographs, No OSHA regulated.

SECTION 4 FIRST AID MEASURES

EYE CONTACT : Flush with enough water.
SKIN CONTACT : Wash with soap and water.
INHALATION : Remove to fresh air.
IF SWALLOWED : Dilute stomach contents with several glasses of water.

SECTION 5 FIRE FIGHTING MEASURES

FLASH POINT : Not applicable.
FLAMMABLE LIMITS : Not applicable.
EXTINGUISHING MEDIA : Water fog, dry chemical, foam or CO₂.

SECTION 6 ACCIDENTAL RELEASE MEASURES

METHOD FOR CLEANING UP : Sweep up or clean up with vacuum cleaner.

SECTION 7 HANDLING AND STORAGE

HANDLING : None required when used as intended.
STORAGE : None required when used as intended.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE STANDARDS : TLV=10mg/m³ (as total dust/ACGIH)
ENGINEERING CONTROLS : None required under normal use.
VENTILATION : None required under normal use.
RESPIRATORY PROTECTION : None required under normal use.
SKIN PROTECTION : None required under normal use.
EYE PROTECTION : None required under normal use.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE : Black fine powder
ODOR : None
pH : Not applicable
VAPOR PRESSURE (mg Hg.): Not applicable
VAPOR DENSITY (AIR = 1): Not applicable
EVAPORATION RATE : Not applicable
BOILING POINT (°C): Not applicable
MELTING POINT (°C): No data available
SOLUBILITY IN WATER : Negligible
SPECIFIC GRAVITY (H₂O=1): 1.6

SECTION 10 STABILITY AND REACTIVITY

STABILITY : This is a stable product.
INCOMPATIBILITY : None
HAZARDOUS DECOMPOSITION : None
HAZARDOUS POLYMERIZATION : Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Mutagenicity : Negative in the Ames Test
Carcinogenicity : No data available
Chronic Effects : No data available

SECTION 12 ECOLOGICAL INFORMATION

No data available.

SECTION 13 DISPOSAL CONSIDERATION

WASTE DISPOSAL METHOD : Dispose of in accordance with federal, state and local environmental regulations.

SECTION 14 TRANSPORT INFORMATION

UN CLASS : None allocated.

SECTION 15 REGULATORY INFORMATION

USA Information :
All chemical substances in this product comply with all applicable rules or orders under TSCA.

Australia Information :
Not classified as hazardous according to criteria of NOHSC.

SECTION 16 OTHER INFORMATION

NFPA rating : Health = 1, Flammability = 1, Reactivity = 0

REFERENCES :

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) Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats. Fundamental and Applied Toxicology 17, pp.280-299.

Information on this data sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions.

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Material Safety Data Sheet

Page: 1 of 3

MSDS No.: 021-000765

Date : 6 July, 2006

SECTION 1 PRODUCT IDENTIFICATION

Product Name : OPC DRUM, Toner Cartridge UG-5515 for Panasonic Facsimile machines
Model UF-5950

Product No. : OPC Drum for UG-5515

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS	CAS #	PROPORTION (% by wt.)	OSHA PEL	ACGIH TLV	OTHER LIMITS
• Aluminum alloy		94.0 - 98.0	Not applicable for drum	Not applicable for drum	None
• Titanium dioxide	13463-67-7	0.5 - 2.0	Not applicable for drum	Not applicable for drum	None
• Binder resin		0.5 - 2.0	Not applicable for drum	Not applicable for drum	None
• Organic semiconductor		0.3 - 0.8	Not applicable for drum	Not applicable for drum	None

SECTION 3 HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW : Greenish blue colored aluminum cylinder, with no odor.

POTENTIAL HEALTH EFFECTS :

EYE EFFECTS : Not applicable under intended use.

SKIN EFFECTS : No corroding or irritating effect is expected at usual
use as a photosensitive drum.

INGESTION EFFECTS : Not applicable under intended use.

INHALATION EFFECTS : Not applicable under intended use.

CHRONIC EFFECTS : Not identified.

MEDICAL CONDITIONS GENERALLY KNOWN TO BE AGGRAVATED BY EXPOSURE :
Not identified.

SECTION 4 FIRST AID MEASURES

EYE CONTACT : Flush with plenty of water

SKIN CONTACT : In case of contact, wash with soap and water.

INHALATION : If needed, get medical attention.

INGESTION : If needed, get medical attention.

NOTE TO PHYSICIANS : None

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA : Dry chemical, CO₂, Foam or water.
UNSUITABLE EXTINGUISHING MEDIA : None
SPECIAL FIRE FIGHTING PROCEDURES : None
UNUSUAL FIRE AND EXPLOSION HAZARDS : None
FLASH POINT (°C): Not applicable.
FLAMMABLE LIMITS : Not applicable.
AUTOIGNITION TEMPERATURE (°C): Not applicable.
FLAMMABILITY : Not applicable.
AUTOFLAMMABILITY : None
EXPLOSIVE PROPERTIES : None
OXIDIZING PROPERTIES : None
HAZARDOUS COMBUSTION PRODUCTS : CO, CO₂
OTHER PROPERTIES : None

SECTION 6 ACCIDENTIAL RELEASE MEASURES

METHOD FOR CLEANING UP : Not applicable under intended use.
PERSONAL PRECAUTIONS : Not applicable under intended use.
ENVIRONMENTAL PRECAUTIONS : Not applicable under intended use.

SECTION 7 HANDLING AND STORAGE

HANDLING : None of safe handling advice.
STORAGE : Keep at temperature not exceeding 45 °C.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES : None.
ENGINEERING CONTROLS : Not required.
RESPIRATORY PROTECTION : Not required.
SKIN PROTECTION : Not required.
EYE/FACE PROTECTION : Not required.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE : Greenish blue colored aluminum cylinder
ODOR : No odor
pH : Not applicable
BOILING POINT (°C): Not applicable
MELTING POINT (°C): 100 °C or higher
DECOMPOSITION TEMPERATURE (°C): No data available
VAPOR PRESSURE (mm Hg.): Negligible
VAPOR DENSITY (AIR = 1): Not applicable
DENSITY/ SPECIFIC GRAVITY (H₂O=1): No data available
SOLUBILITY IN WATER : Negligible
FAT SOLUBILITY : Partially soluble in ketones, esters and aromatic solvents
PARTITION COEFFICIENT (n-Octanol/water): Not soluble in water and n-octanol
PERCENT VOLATILE : Negligible
EVAPORATION RATE : Not applicable

SECTION 10 STABILITY AND REACTIVITY

STABILITY : This is a stable product.
CONDITIONS TO AVOID : None
MATERIALS TO AVOID : None
HAZARDOUS DECOMPOSITION PRODUCTS : None
HAZARDOUS POLYMERIZATION : Will not occur.
CONDITIONS TO AVOID : None

SECTION 11 TOXICOLOGICAL INFORMATION

INHALATION : No data available.
INGESTION : (Data from similar drum) : LD50 : >2000mg/Kg(rats)
EYE : No data available.
SKIN : No data available.
SENSITIZATION : No data available.
MUTAGENICITY : (Data from similar drum) : Negative
(Ames Test: Salmonella typhimurium)
REPRODUCTIVE TOXICITY : No data available.
CARCINOGENICITY : No human carcinogen or potential carcinogen, according to IARC
Monographs, NTP, OSHA(USA) regulation, California
Proposition 65 and EU Directive.
Others : None

SECTION 12 ECOLOGICAL INFORMATION

No information indicating any adverse ecological effects.

SECTION 13 DISPOSAL CONSIDERATION

METHOD OF DISPOSAL : Dispose under conditions which meet all federal, state
and local environmental control regulations.

SECTION 14 TRANSPORT INFORMATION

UN # : None.
UN SHIPPING NAME : None.
UN CLASSIFICATION : None.
UN PACKING GROUP : None.
SPECIAL PRECAUTIONS : None.

SECTION 15 REGULATORY INFORMATION

None.

SECTION 16 OTHER INFORMATION

None.

Information on this data sheet represents our current data and best opinion as to the proper use
in handling of this product under normal conditions.

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Material Safety Data Sheet

Page: 1 of 4

MSDS No.: 021-000932

Date : 1st August, 2008

SECTION 1 PRODUCT IDENTIFICATION

PRODUCT NAME : Toner, Toner Cartridge UG-3350 for Panasonic Facsimile machines Models UF-585, UF-595, UF-590, UF-780, UF-790, DX-600, DX-800, UF-5100, UF-6000 and UF-6100

PRODUCT NUMBER : UG-3350 Toner

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS (Common Name)	CAS #	PROPORTION (% by wt.)	OSHA PEL	ACGIH TLV	OTHER LIMITS
• Polystyrene acrylate copolymer		> 54.0	Not listed	Not listed	None
• Iron oxide	1317-61-9	< 40.0	Not listed	Not listed	None
• Polypropylene		< 4.0	Not listed	Not listed	None
• Organic pigment*	31714-55-3	< 1.0	Not listed	Not listed	None
• Amorphous silica		< 1.0	20mppcf	10.0 mg/m ³	None

*:See [Section 15]

Ethanol, 2-ethoxy- [CAS # 110-80-5] contained less than 0.01wt% in this product.

SECTION 3 HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW :

Odorless black fine powder.

Not a highly flammable, but when suspended in air, is combustible as with most organic powders.

POTENTIAL HEALTH EFFECTS :

EYES : Solid or dusts may cause irritation or corneal injury.

SKIN CONTACT : Essentially nonirritating to skin.

SKIN ABSORPTION : Skin absorption is unlikely due to physical properties.

INGESTION : Oral toxicity is believed to be low.

INHALATION : Minimal irritation to respiratory track may occur.

FIRE AND EXPLOSION :

SENSITIVITY TO MECHANICAL IMPACT : None

SENSITIVITY TO STATIC CHARGE : None

SECTION 4 FIRST AID MEASURES

EYES : Flush eyes immediately with plenty of water for at least 15 minutes.
SKIN : Flush with plenty of water. Use soap.
INGESTION : No adverse effects anticipated by this route of exposure incidental to proper handling.
INHALATION : Remove to fresh air. If effects occur, consult medical personnel.

SECTION 5 FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES :
FLASH POINT : No data available
FLAMMABLE LIMITS
Explosion Limits(Upper): No data available
Explosion Limits(Lower): No data available
EXTINGUISHING MEDIA : Water fog, foam, CO₂, dry chemical.
FIRE-FIGHTING EQUIPMENT : Wear full bunker gear including a positive pressure self-contained breathing apparatus in case of burning in large quantities.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Minimize the release of particulates. Wear personal protective equipment.
Do not use vacuum cleaner.
After by lightly spraying with water to prevent development of dust, spills should be swept up or wiped up. Then residuals can be removed with soap and water. Preferred to use the material in a place, covering up the floor and surrounding matters with suitable sheets such as paper, in a case of being not fit to scrub the floor with water. These used sheets should be wrapped up in spills and transfer into a suitable container for disposal.
Garments may be washed or dry cleaned, after removal of loose toner.

SECTION 7 HANDLING AND STORAGE

Avoid creating dust. Clean up all spills promptly.
Inhalation and contact with skin or eyes should be avoided.
Provide general ventilation. Good general ventilation should be sufficient for most conditions.
Store in cool, well ventilated place away from flames and spark-producing equipment. May toners be preferred to use or to handle at the suitable place without concerning about smudges to which are given rise by releasing them.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES : ACGIH TLV= 10mg/m³(Total dust), 3mg/m³(Respirable dust)
OSHA PEL= 15mg/m³(Total dust), 5mg/m³(Respirable dust)
RESPIRATORY PROTECTION : For most conditions, no respiratory protection should be needed; however, in dusty atmospheres, use an approved dust respirator.
SKIN PROTECTION : No precautions should be needed under normal use.
EYE PROTECTION : No precautions should be needed under normal use.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE : Black fine powder
ODOR : Odorless
BOILING POINT : Not applicable
VAPOR PRESSURE : Not applicable
VAPOR DENSITY : Not applicable
SOLUBILITY (H₂O): Negligible
SPECIFIC GRAVITY : ca. 1.60 g/cm³
MELTING POINT : Not applicable
pH : Not applicable
PERCENT VOLATILE : Not applicable

SECTION 10 STABILITY AND REACTIVITY

STABILITY : This is a stable product.
INCOMPATIBILITY : (SPECIAL MATERIALS TO AVOID) Oxidizing materials.
HAZARDOUS DECOMPOSITION PRODUCTS : CO or NO_x (by high heat and fire)
HAZARDOUS POLYMERIZATION : Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

MUTAGENICITY : Negative in the Ames test
CARCINOGENIC EFFECTS : No data available
CHRONIC EFFECTS : No data available

SECTION 12 ECOLOGICAL INFORMATION

None

SECTION 13 DISPOSAL CONSIDERATION

WASTE DISPOSAL METHOD : Waste must be disposed of in accordance with country and local environmental control regulations.

SECTION 14 TRANSPORT INFORMATION

TRANSPORT INFORMATION : This is not a hazardous product.
UN No. : None allocated.

SECTION 15 REGULATORY INFORMATION

USA INFORMATION :

All chemical substances in this product comply with all applicable rules or orders under TSCA.

SARA Title III Section 313 :

Organic pigment is regarded as Chromium compounds (category Codes : N090).

EU INFORMATION :

None

AUSTRALIA INFORMATION :

Not classified as hazardous according to criteria of NOHSC.

SECTION 16 OTHER INFORMATION

NFPA RATING : Health = 1 Flammability = 1 Reactivity = 0

REFERENCES :

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) Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats. Fundamental and Applied Toxicology 17, pp.280-299.

Information on this data sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions.