Panasonic

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Material Safety Data Sheet

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The following 8 pages contains the Material Safety Data Sheet (MSDS) for the Toner and OPC Drum used for Panafax DF-1100, DX-1000, DX-2000, UF-550, UF-560, UF-770, UF-880, UF-885 and UF-895.

The applicable Product Order Number is:

• UG-3313 - Toner Cartridge (Toner and OPC Drum).

Matsushita Graphic Communication Systems, Inc. Graphic Communication Products Division

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Material Safety Data Sheet

Page: 1 of 4 MSDS No.: 021-000038

Date: 1st September, 1999

SECTION 1 PRODUCT IDENTIFICATION

Product Name: Toner, Toner Cartridge UG-3313 for Panasonic facsimile machine

models DF-1100, DX-1000, DX-2000, UF-550, UF-560, UF-770,

UF-880, UF-885 and UF-895.

Product No.: UG-3313 Toner

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

	INGREDIENTS (Common Name)	CAS #	PROPORTION (% by wt.)	OSHA PEL	ACGIH TLV	OTHER LIMITS
•	Styrene acrylate copolymer	27136-15-8	59.0	None established	None established	None
•	Iron oxide	1317-61-9	38.0	None established	None established	None
•	Polypropylene	25085-53-4	3.0	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.

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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 CO_2 .

SECTION 6 ACCIDENTIAL 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.

RESPRIRATORY PROTECTION: None required under normal use.

SKIN PROTECTION: None required under normal use.

EYE PROTECTION: None required under normal use.

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SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Black fine powder

ODOR: None

SOLUBILITY IN WATER: Negligible

SPECIFIC GRAVITY $(H_2O=1)$: 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

No data available.

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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

Components of this product are listed on the TSCA Inventory.

SECTION 16 OTHER INFORMATION

No specific notes.

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.: 021-000039

Date: 1st September, 1999

SECTION 1 PRODUCT IDENTIFICATION

Product Name: OPC Drum, Toner Cartridge UG-3313 for Panasonic facsimile

machine models DF-1100, DX-1000, DX-2000, UF-550, UF-560,

UF-770, UF-880, UF-885 and UF-895.

Product No.: UG-3313 OPC DRUM

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

		PROPORTION			
INGREDIENTS	CAS #	(% by wt.)	OSHA PEL	ACGIH TLV	OTHER LIMITS
Aluminum alloy		95.0 - 98.0	Total: 15 mg/m ³ Respire: 5 mg/m ³	None established	None
Titanium dioxide	13463-67-7	0.5 - 2.0	Total: 15 mg/m ³	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: Light gray 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.

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SECTION 4 FIRST AID MEASURES

EYE CONTACT: Not applicable under intended use.

SKIN CONTACT: Wash with soap and water.

INHALATION: Not applicable under intended use.

INGESTION: Not applicable under intended use.

NOTE TO PHYSICIANS: None

SECTION 5 FIRE FIGHTING MEASURES

FLASH POINT : Not applicable.

FLAMMABLE LIMITS: Not applicable.

EXTINGUISHING MEDIA : Dry chemical, CO_2 , Foam or water.

HAZARDOUS COMBUSTION PRODUCTS : CO, CO2

SPECIAL FIRE FIGHTING PROCEDURES: None UNUSUAL FIRE AND EXPLOSION HAZARDS: 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.

RESPRIRATORY PROTECTION : Not required.

SKIN PROTECTION: Not required.

EYE PROTECTION: Not required.

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SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Light gray colored aluminum cylinder

ODOR: No odor

pH : Not applicable
VAPOR PRESSURE (mm Hg.) : Negligible
VAPOR DENSITY (AIR = 1) : Not applicable
EVAPORATION RATE : Not applicable
BOILING POINT (°C) : Not applicable
MELTING POINT (°C) : 100 °C or higher

SOLUBILITY IN WATER: Negligible

SPECIFIC GRAVITY $(H_2O=1)$: No data available

SECTION 10 STABILITY AND REACTIVITY

STABILITY: This is a stable product.

No conditions to avoid.

MATERIALS TO AVOID: None

HAZARDOUS DECOMPOSITION: None

HAZARDOUS POLYMERIZATION: Will not occur.

No conditions to avoid.

SECTION 11 TOXICOLOGICAL INFORMATION

INHALATION: No data available.

INGESTION: No data available.

EYE: No data available.

SKIN: No data available.

SENSITIZATION : No data available.

MUTAGENICITY: Ames Test: Negative (Test strains: S.typhimurium)

REPRODUCTIVE TOXICITY: No data available.

CARCINOGENICITY: No carcinogen or potential carcinogen, according to IARC

Monographs, NTP, OSHA(USA) regulation and EU Directive.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE : None

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SECTION 12 ECOLOGICAL INFORMATION

No data available.

SECTION 13 DISPOSAL CONSIDERATION

WASTE DISPOSAL METHOD: No special disposal technique required. Dispose of in

accordance with 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

EU INFORMATION :

INFORMATION ON THE LABEL: Not required.

SPECIFIC PROVISION IN RELATION OF MAN OR THE ENVIRONMENTAL: Not regulated.

USA INFORMATION :

INFORMATION ON THE LABEL: Not required.

SARA Title 3 #313: None.

CARIFORNIA PROPOSITION 65 : 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.