

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 UF-585 and UF-595.

The applicable Product Order Number is:

- **UG-3350** - Toner Cartridge ([Toner](#) and [OPC Drum](#)).

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Material Safety Data Sheet

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MSDS No.: 021-000031

Date : 19th April, 1999

SECTION 1 PRODUCT IDENTIFICATION

Product Name : Toner, Toner Cartridge UG-3350 for Panasonic Facsimile machines Models UF-585, UF-595

Product No. : UG-3350 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.

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 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.

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

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

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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MSDS No.: 021-000032

Date : 19th April, 1999

SECTION 1 PRODUCT IDENTIFICATION

Product Name : OPC DRUM, Toner Cartridge UG-3350 for Facsimile machines
UF-585, UF-595

Product No. : UG-3350 OPC DRUM

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: >200mg/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.
Orsters : 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

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.

CALIFORNIA PROPOSITION 65 : None.

SECTION 16 OTHER INFORMATION

Abbreviation:

"EU" stands for European union.

"OSHA PEL" stands for PEL (Permissible Exposure Limit) under Occupational safety and Health Administration.

"ACGIH TLV" stands for TLV (Threshold Limit Value) under American Conference of Governmental Industrial Hygienists.

"IARC" stands for International Agency for Research on Cancer.

"NTP" stands for National Toxicology Program (USA).

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