

Material Safety Data Sheet

May be used to comply with
OSHA's Hazard Communication Standard,
29 CFR 1910.1200. Standard must be
consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY (As Used on Label and List)

OPC Drum (SY-B004U) in PK-12 for Facsimile TF501,TF505,TF601,TF605 and TF610

Section I

| | |
|---|--|
| Manufacture's Name TEC CORPORATION | Emergency Telephone Number |
| Address (Number, Street, City, State, and ZIP Code) Shuwa-Shiba Park Bldg. A, 4th floor 2-4-1, Shibakoen Minato-ku, Tokyo 105, JAPAN | Telephone Number for Information 03-3438-6948 |
| | Date Prepared 1-Oct-98 |
| | Signature of Preparer (optional) |

Section II - Hazardous Ingredients/Identity Information

| Hazardous Components (Specific Chemical Identity; Common Name(s)) | OSHA PEL | ACGIH TLV | Other Limits | |
|--|----------|-----------|--------------|--------------|
| | | | Recommended | % (optional) |
| Binder resin | N.A. | N.A. | N.A. | 0.5 |
| Charge carrier transport material | N.A. | N.A. | N.A. | 0.4 |
| Pigment | N.A. | N.A. | N.A. | 0.1 |
| Under coat material | N.A. | N.A. | N.A. | 0.1 |
| Aluminum | N.A. | N.A. | N.A. | 98.9 |
| | | | | |
| | | | | |
| | | | | |

Section III - Physical/Chemical Characteristics

| | | | |
|-------------------------|-------|---|-------|
| Boiling Point | N. A. | Specific Gravity (H ₂ O = 1) | 1.2 |
| Vapor Pressure (mm Hg.) | N. A. | Melting Point | N. A. |
| Vapor Density (AIR=1) | N. A. | Evaporation Rate (Butyl Acetate = 1) | N. A. |

Solubility in Water

Insoluble

Appearance and Odor

Greenish-blue, solid cylinder and odorless

Section IV - Fire and Explosion Hazard Data

| | | | |
|------------------------------------|------------------|-------------|-------------|
| Flash Point (Method used) N. A. | Flammable Limits | LEL N.A. | UEL N.A. |
|------------------------------------|------------------|-------------|-------------|

Extinguishing Media

Water, foam, CO₂ and dry chemicals

Special Fire Fighting Procedures

No special extinguishing media is required.
But avoid inhalation of smoke.

Unusual Fire and Explosion Hazards

This materials has no unusual fire and explosion hazards.

Section V - Reactivity Data

| | | | |
|-----------|----------|---|---------------------|
| Stability | Unstable | | Conditions to Avoid |
| | Stable | X | |

Incompatibility (Materials to Avoid)

None

Hazardous Decomposition or Byproducts

None

| | | | |
|--------------------------|----------------|---|---------------------|
| Hazardous Polymerization | May Occur | | Conditions to Avoid |
| | Will Not Occur | X | None |

Section VI-Health Hazard Data

| | | | |
|--------------------|-------------|-------|------------|
| Route(s) of Entry: | Inhalation? | Skin? | Ingestion? |
| | None | None | None |

Health Hazards (Acute and Chronic)

The coated compounds of OPC Drum emerged satisfactorily from the acute toxicity test, dosage range, 100-400mg/kg. And they are not mutagenic.

| | | | |
|------------------|------|------------------|-----------------|
| Carcinogenicity: | NTP? | IARC Monographs? | OSHA Regulated? |
| | None | None | None |

Signs and Symptoms of Exposure

None

Medical Conditions

Generally Aggravated by Exposure

None

Emergency and First Aid Procedures

No steps required

Section VII-Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

If broken up into pieces and spilled, sweep up or vacuum.

Waste Disposal Method

No special disposal technique required.

Dispose in accordance with federal, state or local environmental regulations.

Precautions to Be Taken in Handling and Storing

None

Other Precautions

None

Section VIII - Control Measures

Respiratory Protection (Specify Type)

Not necessary

| | | |
|-------------|----------------------|---------------|
| Ventilation | Local Exhaust | Special |
| | Not necessary | Not necessary |
| | Mechanical (General) | Other |
| | Not necessary | Not necessary |

Protective Gloves

Not necessary

Eye Protection

Not necessary

Other Protective Clothing or Equipment

Not necessary

Work/Hygienic Practices

Not necessary

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IDENTITY (As Used on Label and List)

Toner (PT103) in TK-12 (on PK-12), TK-04 (on PK-03) for Facsimile TF501, TF505, TF601, and TF610

Section I

| | |
|---|--|
| Manufacture's Name TOSHIBA TEC CORPORATION | Emergency Telephone Number |
| Address (Number, Street, City, State, and ZIP Code) Shuwa-Shiba Park Bldg. A, 4th floor 2-4-1, Shibakoen Minato-ku, Tokyo 105, JAPAN | Telephone Number for Information 03-3438-6948 |
| | Date Prepared 17-Jun-99 |
| | Signature of Preparer (optional) |

Section II - Hazardous Ingredients/Identity Information

| Hazardous Components (Specific Chemical Identity; Common Name(s)) | Cont | ACGIH/OSHA TLV/TWA | Hazardous Chemicals | | Carcinogens | | |
|--|------|-------------------------|------------------------|------|-------------|-----|------|
| | | | ACGIH | OSHA | OSHA | NTP | IARC |
| Ingredients (CAS No.) | % | | | | | | |
| Styrene Acrylate Copolymer (CAS No. 25767-47-9) | 91 | 10mg/15m ³ * | x | x | x | x | x |
| Carbon Black (CAS No. 1333-86-4) | 5-7 | 3.5mg/3.5m ³ | O | O | x | x | 2B |
| Polypropylene (CAS No. 9003-07-0) | 1-3 | 10mg/15m ³ * | x | x | x | x | 3 |
| Additives (CAS No. 67762-90-7) | 1-3 | 10mg/15m ³ * | x | x | x | x | x |

Notes: x : not listed O : listed NA : Not available * : for total dust

Section III - Physical/Chemical Characteristics

NA : Not available

| | | | |
|-------------------------|------------|---|-----------|
| Boiling Point | N. A. | Specific Gravity (H ₂ O = 1) | 1.15 |
| Vapor Pressure (mm Hg.) | N. A. | Melting Point | 110 deg C |
| Vapor Density (AIR=1) | N. A. | Evaporation Rate (Butyl Acetate = 1) | N. A. |
| Solubility in Water | Negligible | | |

Appearance and Odor

Black powder and odorless

Section IV - Fire and Explosion Hazard Data

NA : Not available

| | | | | |
|---------------------------|---|------------------|--------------|--------------|
| Flash Point (Method used) | N. A. | Flammable Limits | LEL N. A. | UEL N. A. |
| Explosion Limits | lower = 60 g/m ³ upper = unknown | | | |

Extinguishing Media

Water, ABC dry chemical or Protein type air foams are recommended

Special Fire Fighting Procedures

Do not use methods which may create a dust cloud
such as high pressure, water steam etc.

Unusual Fire and Explosion Hazards

Thermal decomposition of organic components
may result in occurrence of oxides of carbon.

Section V - Reactivity Data

| | | | |
|-----------|----------|---|--|
| Stability | Unstable | | Conditions to Avoid ; Do not expose to temperature above 200°C |
| | Stable | X | |

Incompatibility (Materials to Avoid)

Avoid exposure to strong oxidisers

| | | | |
|--------------------------|----------------|---|---------------------------------|
| Hazardous Polymerization | May Occur | | Conditions to Avoid None |
| | Will Not Occur | X | |

Hazardous Decomposition or Byproduct ; Carbon Oxide

Section VI-Health Hazard Data

| | |
|--------------|--|
| Eye Contact | Eye irritation will be caused. If contacted, flush eyes with running water for several minutes with eyelids open. Consult an eye-doctor. |
| Skin Contact | No symptoms will appear. If contacted, remove contaminated clothes and wash skin with soap and water. |
| Inhalation | Lung irritation, difficult breathing, sneezing, coughing will be caused. If inhaled, remove the sufferer to fresh and call a physician. |
| Ingestion | Stmach irritation will be caused. If ingested, call a physician. |

Health Hazards (Acute and Chronic)

Acute Oral toxicity; LD₅₀>2000mg/kg(Rat)

Ames test : Negative

Acute Inhalation toxicity; LC₅₀>5.04mg/l(Rat)

Skin Irritation : Non irritant (Rabbit)

Eye Irritation : Minimal irritant (Rabbit)

| | | | |
|------------------|------|------------------|-----------------|
| Carcinogenicity: | NTP? | IARC Monographs? | OSHA Regulated? |
| | NL | NL | NL |
| | | | NL:Not Listed |

Section VII-Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

Spray water over the spilled and/or leaked materials and then clean out into a container.

A vacuum cleaner with explosion-proof can be used for small spills.

Waste Disposal Method

Landfill or incinerate little by little in accordance with federal, state and federal regulations.

Section VIII - Control Measures

Respiratory Protection (Specify Type)

Nuisance dust respirator

| | | |
|-------------------------------|----------------------|---------------|
| Ventilation | Local Exhaust | Special |
| | Recommended | Not necessary |
| | Mechanical (General) | Other |
| | Recommended | Not necessary |
| Protective Gloves | Eye Protection | |
| Recommended | Safety goggles | |
| Other Protective or Equipment | Not necessary | |

Section IX - Special Precaution

Precautions to be taken in handling and storing

Store in dry cool place. Keep away from sparks and open flame.

Use with adequate ventilations.

Other Precautions

None

USER'S RESPONSIBILITY

This bulletin cannot cover all possible situations which the user may experience during processing. Each aspect of your operation must be examined if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin must be provided to your employees or customers. It is your responsibility to use this information to develop appropriate work practice guidelines and employee instructional programs for your operation.

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