Safety Data Sheets

1. Identification of the substance/mixture and of the company/undertaking
1.1 Product identifier:
   Product name: T-FC75U-Y
   e-STUDIO6570C Series
   SDS NO.: TFC75UY-1
1.2 Relevant identified uses of the substance or mixture and uses advised against
   Toner for electrophotographic equipment
1.3 Details of the supplier of the safety data sheet
   Manufacturer: Toshiba TEC Corporation
   Address: Gate City Ohsaki West Tower 1-11-1, Osaki, Shinagawa-ku, Tokyo, 141-8562, Japan
   Telephone number: +81-3-6830-9100
   Supplier: Toshiba America Business Solutions, Inc.
   Emergency Telephone No.: +1-800-424-9300 (CHEMTREC)
   For calls within the U.S. only.
   +1 703-527-3887 (collect calls accepted) (CHEMTREC)
   Outside USA and Canada
   Toshiba of Canada Limited
   Telephone No.: +1-905-470-3500
   For calls within Canada only.

2. Hazards identification
   GHS classification and label elements of the product
2.1 Classification of the substance or mixture
   HEALTH HAZARDS
   Acute toxicity Oral: Out of class
   Acute toxicity inhalation: Out of class
   Skin corrosion/irritation: Out of class
   Eye damage/eye irritation: Out of class
   Sensitization-skin: Out of class
   ENVIRONMENT HAZARDS
   Hazardous to the aquatic environment-acute toxicity: Out of class
   (Note) GHS classification without description: Not applicable/Out of classification/Not classifiable

3. Composition/information on ingredients
   Substance/Mixtures:
   3.2 Mixtures

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>content(%)</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyester resin</td>
<td>65-75</td>
<td>-----</td>
</tr>
<tr>
<td>Organic pigment</td>
<td>&lt;10</td>
<td>-----</td>
</tr>
<tr>
<td>Wax</td>
<td>&lt;10</td>
<td>-----</td>
</tr>
<tr>
<td>Amorphous silica</td>
<td>&lt;5</td>
<td>68909-20-6</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>&lt;1</td>
<td>13463-67-7</td>
</tr>
<tr>
<td>Ceramic materials and wares, chemicals</td>
<td>10-20</td>
<td>66402-68-4</td>
</tr>
</tbody>
</table>

----- TRADE SECRET
4. First-aid measures
4.1 Descriptions of first-aid measures
   Inhalation
   Remove from exposure area to fresh air immediately.
   Contact a physician if there is any difficulty in breathing or other signs of distress.
   Skin Contact
   Wash with soap and water.
   If irritation occurs or is persistent, seek medical attention.
   Eye Contact
   Immediately flush eyes with plenty of water for at least 15 minutes.
   If irritation persists, call a physician.
   Ingestion
   Dilute stomach contents with several glasses of water.

5. Fire-fighting measures
5.1 Extinguishing media
   Suitable extinguishing media
   Foam, carbon dioxide, dry chemical, water fog
   Unsuitable extinguishing media
   None
5.2 Special Hazards
   Can form explosive dust-air mixtures when finely dispersed in air.
5.3 Advice for firefighters
   Special protective equipment and precautions for fire-fighters
   Wear cold insulating gloves/face shield/eye protection.

6. Accidental release measures
6.1 Personnel precautions, protective equipment and emergency procedures
   Wear proper protective equipment.
   Avoid breathing dust.
6.2 Environmental precautions
   Do not wash away into shower or waterway.
6.3 Methods and materials for containment and cleaning up
   Sweep slowly spilled toner/developer and carefully transfer into a waste container.

7. Handling and storage
7.1 Precautions for safe handling
   Preventive measures
   Do not breathe dust.
   Exhaust/exhaustor
   No special ventilation equipment is needed under intended use.
7.2 Conditions for safe storage, including any incompatibilities
   Recommendation for storage
   Store in a dry place.
   Keep out of the reach of children.
7.3 Specific end use(s)
   Toner for electrophotographic equipment

8. Exposure controls/personal protection
8.1 Control parameters
   ACGIH
   (Titanium dioxide)
   ACGIH(1992) TWA: 10mg/m3 (LRT irr)
   OSHA-PEL
(Titanium dioxide)
TWA 15mg/m³
(as the product)
TWA 15mg/m³ (Total dust)
5mg/m³ (Respirable fraction)
DMG-MAK
(as the product)
4mg/m³ (Inhalable fraction)
1.5mg/m³ (Respirable fraction)

8.2 Exposure controls
Individual protection measures
Respiratory protection
Not required under intended use.
Hand protection
Not required under intended use.
Eye protection
Not required under intended use.
Skin and body protection
Not required under intended use.

9. Physical and Chemical Properties
9.1 Information on basic physical and chemical properties
Physical properties
Appearance: powder/granule
Color: yellow
Odor: None
Phase change temperature
Melting point/Freezing point: 110-150 (Softening point) °C
Specific gravity/Density: 1.1-1.5 g/cm³
Solubility
Solubility in water: insoluble

9.2 Other information
Explosive Properties
Little possibility in intended use.
According to Explosive Evaluation, can form explosive dust-air mixtures when finely dispersed in air, like most finely grained organic powder.
10. Stability and Reactivity
10.2 Chemical stability
Stable.
10.3 Possibility of hazardous reactions
None
10.5 Incompatible materials
None
10.6 Hazardous decomposition products
None

11. Toxicological Information
11.1 Information on toxicological effects
Acute toxicity
Acute toxicity (Oral), Product
LD$_{50}$ > 2,000mg/kg
(This was the highest attainable mass.)
Acute toxicity (Gases inhalation), Product
LC$_{50}$ > 5.30mg/l
(This was the highest attainable concentration.)
Irritant properties
Skin corrosion/irritation
Non-irritant.
Serious eye damage /irritation
Non-irritant.
Skin sensitization
Non-sensitizer
Germ cell mutagenicity
Ames test : Negative
Carcinogenicity
(Titanium dioxide)
The IARC reevaluated titanium dioxide as a Group 2B carcinogen (possible human carcinogen).
In animal chronic inhalation studies, carcinogenicity was observed in only specific rats. This is attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. Epidemiological study to date has not revealed any evidence of the relation between work exposure of titanium dioxide and respiratory diseases.
No reproductive toxicity data available
Delayed and immediate effects and also chronic effects from short- and long-term exposure
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 (16 mg/m3) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animals in the middle (4mg/m3) exposure group. These findings are attributed to "lung overloading", a general response to excessive amounts of any dust retained in the lungs for a prolonged period.
No Aspiration hazard data available

12. Ecological Information
12.1 Toxicity
Aquatic toxicity
Aquatic acute toxicity component(s) data
LC$_{50}$ is greater than 1000mg/L (fish)
EC$_{50}$ is greater than 1000mg/L (daphnia)
EC$_{50}$ is greater than 1000mg/L (Algal)
(This was the highest attainable mass.)
No Persistence and degradability data available
No Bioaccumulative potential data available
No Mobility in soil data available
Ozone depleting chemical data not available

13. Disposal considerations
13.1 Waste treatment methods
Dispose of in accordance with local, state and federal regulations.
Empty plastic container may be recycled.

14. Transport Information
UN No, UN CLASS
Not applicable to UN NO.
Land DOT 49 CFR,ADR : Not classified as Dangerous Goods
Sea IMDG Code : Not classified as Dangerous Goods
Air ICAO-TI : Not classified as Dangerous Goods

15. Regulatory Information
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

US/Canada Information
Toxic Substance Control Act (TSCA)
All chemical substances in this product comply with all applicable rules or orders under TSCA.
California Proposition 65
Not regulated.
Not regulated.
RCRA(40 CFR 261)
Product or components not listed.
CERCLA/SARA Information
Not regulated.
NTP Annual Report on Carcinogens
Not listed as an NTP carcinogen.

Controlled Products Regulations(Canada)
This product has been classified in accordance with the hazard criteria of the CPR.
Workplace Hazardous Materials Information System (Canada)
No toxicology information available.

EU Information
Regulation(EC)No.1907/2006(REACH)
All chemical substances in this product comply with all applicable rules or order under 1907/2006.

Australian Information
Not classified as hazardous according to criteria of NOHSC
The substance is being imported or manufactured under a permit granted under section 21U of the Industrial Chemicals (Notification and Assessment)Act 1989

16. Other information
Reference Book
Globally Harmonized System of classification and labelling of chemicals, (4th ed., 2011), UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 18th edit., 2013 UN Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012)
2012 EMERGENCY RESPONSE GUIDEBOOK(US DOT)
2014 TLVs and BEIs. (ACGIH)
http://monographs.iarc.fr/ENG/Classification/index.php
Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats
Lung Clearance and Retention of Toner, Utilizing a Tracer Technique, during Chronic Inhalation Exposure in Rats

Definitions and Abbreviations
OSHA PEL stands for Permissible Exposure Limit under Occupational Safety and Health Administration (USA)
ACGIH TLV stands for Threshold Limit Value under American Conference of Governmental Industrial Hygienists (USA)
DFG-MAK stands for Maximale Arbeitsplatzkonzentrationen under Deutsche Forschungsgemeinschaft
TWA stands for Time Weighted Average
IARC stands for International Agency for Research on Cancer
NTP stands for National Toxicology Program (USA)
DOT stands for Department of Transportation (USA)
NOHSC stands for National Occupational Health and Safety Commission (Australia)
ADG stands for Australian Dangerous Goods

Restrictions
This information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. It are advised to make their own tests to determinate the safety and suitability of each such product or combination for their own purposes.
The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.