Date of revision : 17/02/2025

Safety Data Sheet

Section 1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:
Product name: T-FC305PY-R
e-STUDIO305CS ,305CP ,306CS
SDS NO. TFC305PYREN-3

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 Tec Germany Imaging Systems GmbH
Address: CARL-SCHURZ-STR. 7, D-41460 NEUSS GERMANY
Telephone No.+49-2131-1245-0
Email address: info@toshibatec-tgis.com
(European Headquarters)
Emergency telephone No. +1-703-527-3887 (collect calls accepted) (CHEMTREC)

Toshiba Tec U.K. Imaging Systems Limited
Address: Abbey Cloisters, Abbey Green, Chertsey, KT16 8RB
Telephone No. +44-1932-580100 For calls within UK only.
Email address: info@toshibatec.co.uk.

Toshiba Australia Pty, Ltd.
1 Eden Park Drive, Macquarie Park, NSW 2113, Australia
Telephone No.+61-2-98876000 (Business hours)
Ph 13 11 26 (After hours, Australia)
(Poisons Information Centre)

Section 2. Hazards identification

GHS classification and label elements of the product

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No.1272/2008 [CLP]
HEALTH HAZARDS
Acute toxicity (Oral): Out of classification
ENVIRONMENT HAZARDS
Hazardous to the aquatic environment, short-term (acute):Out of classification
(Note) GHS classification without description: Not classified/Classification not possible

2.2 Label elements
No GHS label element
No Signal word

2.3 Other hazards
The product does not contain any ingredient designated as PBT and/or vPvB.
The product does not contain any ingredients designated as Endocrine disrupting properties.

Section 3. Composition/information on ingredients

Mixture/Substance selection:

3.2 Mixture

Ingredient name	Content (%)	CAS No.
titanium dioxide	<1	13463-67-7

Titanium dioxide; Classification according to Regulation (EC) No. 1272/2008 (CLP) : Carc.2, H351(inhalation)

Components contributing to the hazard

The product does not contain any ingredients listed in REACH SVHC candidate list.

Section 4. First-aid measures

4.1 Descriptions of first-aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing.
If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
Get medical attention if adverse health effects persist or are severe.
If unconscious, place in recovery position and get medical attention immediately.
Maintain an open airway.
Loosen tight clothing such as a collar,tie, belt or waistband.
In case of inhalation of decomposition products in a fire, symptoms may be delayed.
The exposed person may need to be kept under medical surveillance for 48 hours.

Skin Contact

Flush contaminated skin with plenty of water.
Remove contaminated clothing and shoes.
Get medical attention if symptoms occur.
Wash clothing before reuse.
Clean shoes thoroughly before reuse.

Eye Contact

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids.
Check for and remove any contact lenses.
Continue to rinse for at least 10 minutes.
Get medical attention if irritation occurs.

Ingestion

Wash out mouth with water.
Remove dentures if any.
Remove victim to fresh air and keep at rest in a position comfortable for breathing.
If material has been swallowed and the exposed person is conscious, give small quantities of water to drink.
Stop if the exposed person feels sick as vomiting may be dangerous.
Do not induce vomiting unless directed to do so by medical personnel.
If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.
Get medical attention if adverse health effects persist or are severe.
Never give anything by mouth to an unconscious person.

If unconscious, place in recovery position and get medical attention immediately.
Maintain an open airway.
Loosen tight clothing such as a collar, tie, belt or waistband.

4.2 Most important symptoms and effects, both acute and delayed

(Symptoms when inhalation or ingestion)

(Inhalation)

Exposure to decomposition products may cause a health hazard.
Serious effects may be delayed following exposure.

(Injestion)

No known significant effects or critical hazards.

(Symptoms when skin and/or eye contact)

(Skin contact)

No known significant effects or critical hazards.

(Eye contact)

No known significant effects or critical hazards.

Protective measures for first aid

No action shall be taken involving any personal risk or without suitable training.
It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.3 Indication of any immediate medical attention and special treatment needed

In case of inhalation of decomposition products in a fire, symptoms may be delayed.
The exposed person may need to be kept under medical surveillance for 48 hours.

Section 5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use dry chemical powder.

Unsuitable extinguishing media

Do not use water jet.

5.2 Special Hazards

Fine dust clouds may form explosive mixtures with air.

5.3 Advice for firefighters

Specific fire-fighting measures

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.
No action shall be taken involving any personal risk or without suitable training.
Move containers from fire area if this can be done without risk.
Use water spray to keep fire-exposed containers cool.

Special protective equipment and precautions for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

6.1 Personnel precautions, protective equipment and emergency procedures

(For non-emergency personnel)

No action shall be taken involving any personal risk or without suitable training.
Evacuate surrounding areas.
Keep unnecessary and unprotected personnel from entering.
Do not touch or walk through spilled material.

Shut off all ignition sources.
No flares, smoking or flames in hazard area.
Provide adequate ventilation.
Wear appropriate respirator when ventilation is inadequate.
Put on appropriate personal protective equipment.
(For emergency responders)
If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials.
See also the information in "For non-emergency personnel".

6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

(Small spill)
Move containers from spill area.
Use spark-proof tools and explosion-proof equipment.
Vacuum or sweep up material and place in a designated, labeled waste container.
Dispose of via a licensed waste disposal contractor.
(Large spill)
Move containers from spill area.
Approach release from upwind.
Prevent entry into sewers, water courses, basements or confined areas.
Vacuum or sweep up material and place in a designated, labeled waste container.
Dispose of via a licensed waste disposal contractor.
Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

6.4 Reference to other sections

Refer to section 13

Section 7. Handling and storage

7.1 Precautions for safe handling

Preventive measures

Put on appropriate personal protective equipment (see Section 8).
Do not ingest. Avoid contact with eyes, skin and clothing.

(Protective measures against fire and explosion)

Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame).

(Exhaust/ventilator)

Prevent dust accumulation. Use only with adequate ventilation.
Wear appropriate respirator when ventilation is inadequate.

Safety Measures

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
Workers should wash hands and face before eating,drinking and smoking.
Remove contaminated clothing and protective equipment before entering eating areas.
See also Section 8 for additional information on hygiene measures.

Advice on general occupational hygiene

Wash hands, forearms and face thoroughly after handling chemical products, before eating,

smoking and using the lavatory and at the end of the working period.
Appropriate techniques should be used to remove potentially contaminated clothing.
Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

7.2 Storage

Conditions for safe storage

Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use.
Store in accordance with local regulations. Store in a segregated and approved area.
Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink.
Eliminate all ignition sources. Separate from oxidizing materials.
Keep container tightly closed and sealed until ready for use.
Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers.
Use appropriate containment to avoid environmental contamination.

(Incompatible storage condition)

To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material.
Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources.
Take precautionary measures against electrostatic discharges.

Container and packaging materials for safe handling

Empty containers retain product residue and can be hazardous.
Do not reuse container.

7.3 Specific end use(s)

Toner for electrophotographic equipment

Section 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)

DFG-MAK

(as the product)
4mg/m3 (Inhalable fraction)
1.5mg/m3 (Respirable fraction)

8.2 Exposure controls

Appropriate engineering controls

The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Respiratory protection

Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Eye protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists,gases or dusts.

If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin and body protection

(Hand protection)

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

(Body protection)

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

(Other skin protection)

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Section 9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical state: Powder/granule

Color: Yellow

Odor: Slight odor

Odor threshold data is not available.

Melting point/Freezing point: 110-150(Softning point)℃

Melting point/Freezing point data is not available.

Boiling point or initial boiling point data is not available.

Flammability (gases, liquids and solids) data is not available.

Lower and upper explosion limit/flammability limit: Not applicable

Flash point: Not applicable

Auto-ignition temperature: Not applicable

Decomposition temperature: Not applicable

pH data is not available.

Kinematic viscosity: Not applicable

Solubility:

Solubility in water: Insoluble
Vapor pressure data is not available.
Density and/or relative density: 1.1-1.5g/cm3
Particle characteristics: No information

Section 10. Stability and Reactivity

10.1 Reactivity
No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability
The product is stable.
10.3 Possibility of hazardous reactions
Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid
Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame).
Take precautionary measures against electrostatic discharges.
To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material.
Prevent dust accumulation.
10.5 Incompatible materials
Reactive or incompatible with the following materials:oxidizing materials
10.6 Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological Information

11.1 Information on toxicological effects
Acute toxicity
Acute toxicity (Oral)
[Product data]
LD50 is greater than 5,000mg/kg(Rat)
Acute toxicity (Inhalation)
[Product data]
(Dust/Mists inhalation)
Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Irritant properties
Serious eye damage/irritation
No known significant effects or critical hazards.
Sensitization
Skin sensitization
[Data for components of the product]
No known significant effects or critical hazards.
Germ cell mutagenicity
[Data for components of the product]
Ames test :Negative
Carcinogenicity
[Data for components of the product]

(titanium dioxide)
In the animal experiment with very high concentration of titanium dioxide (excessive burden of rat's lungs clearance mechanism (overload phenomenon)), the rat alone showed lung tumor. Under a normal use practice, the concentration should be far lower than the above; and it is assumed that there is no such use.
Also, relation between respiratory disease and work exposure of titanium dioxide is not observed with epidemiological survey.

Specific target organ toxicity (STOT)

STOT-single exposure

[Data for components of the product]

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.

Aspiration hazard data is not available.

11.2 Information on other hazards

Endocrine disrupting properties is not available.

Section 12. Ecological Information

12.1 Toxicity

Aquatic toxicity

[Data for components of the product]

Hazardous to the aquatic environment, short-term (acute)

Acute Toxicity for Daphnia(EC50) : EC50 is greater than 1000 mg/L

12.2 Persistence and degradability

[Data for components of the product]

Not available

12.3 Bioaccumulative potential

[Data for components of the product]

Not available

12.4 Mobility in soil

[Data for components of the product]

Not available

12.5 Results of PBT and vPvB assessment

PBT and/or vPvB assessment data is not available.

12.6 Endocrine disrupting properties

Endocrine disrupting properties is not available.

12.7 Other adverse effects

Ozone depleting chemical data is not available.

Section 13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

13.1 Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this

product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues.
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport Information

UN No., UN CLASS

14.1 UN Number or ID Number : Not regulated
14.2 UN Proper Shipping Name : Not regulated
14.3 Class or division (Transport hazard class) : Not regulated
14.4 Packing group : Not regulated

Land DOT 49 CFR,ADR :Not applicable
Sea IMDG Code :Not applicable
Air ICAO-TI,IATA-DGR :Not applicable

14.5 Environmental hazards

Marine pollutants (yes/no) : no

14.6 Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable to Transport in bulk according to Annex II of MARPOL and the IBC Code

Section 15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

The product does not contain any ingredients listed in REACH SVHC candidate list.
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.
OSHA Hazard Communication Standard, 29CFR 1910.1200
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.

Hazardous Products Regulations (Canada)
This product has been classified in accordance with the hazard criteria of the HPR.
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 REACH.

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

NewZealand Information
Not classified as hazardous according to criteria of HSNO

China Information
Regulations on Safe Management on Hazardous Chemicals (China Decree 591)
All chemical substances in this product comply with all applicable rules or orders under China Decree 591.

15.2 Chemical safety assessment
Advice on safe handling for this product can be found in sections 7 and 8 of this SDS.

Section 16. Other information

References and sources for data
Globally Harmonized System of classification and labelling of chemicals, UN
Recommendations on the TRANSPORT OF DANGEROUS GOODS 22nd edit., 2021 UN
2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT)
2024 TLVs and BEIs. (ACGIH)
Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats
H.Muhle et.al; Fundamental and Applied Toxicology 17.280-299(1991)
Lung Clearance and Retention of Toner, Utilizing a Tracer Technique, during Chronic Inhalation Exposure in Rats
B.Bellmann; Fundamental and Applied Toxicology 17.300-313(1991)

Abbreviations and acronyms
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 data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

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.