Date of revision : 2024/08/01

Safety Data Sheet

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

1.1 Product identifier:
Product name: T-FC415P-Y,T-FC415P-Y-M
e-STUDIO5015AC Series
e-STUDIO2510AC Series
SDS NO. TFC415PY-4

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

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)

Toshiba Singapore Pte. Ltd.
Telephone No.+65-6516-0380

Section 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 classification
Acute toxicity (Inhalation):Out of classification
Skin corrosion/irritation: Out of classification
Serious eye damage/eye irritation : Out of classification
Skin sensitization: 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

Section 3. Composition/information on ingredients

Mixture/Substance selection:

3.2 Mixture

Ingredient name	Content (%)	CAS No.
Polyester resin	80-90	------
Organic Pigment	<10	------
Wax	<10	------
Amorphous silica	<5	7631-86-9
Titanium dioxide	<1	13463-67-7

------ TRADE SECRET

Section 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.

Section 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 protective gloves/protective clothing/eye protection/face protection.

Section 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 sewers or waterway.

6.3 Methods and materials for containment and cleaning up

Sweep slowly spilled toner/developer and carefully transfer into a waste container.
Choose a dust explosion-proof type if you use the vacuum cleaner.

Section 7. Handling and storage

7.1 Precautions for safe handling

Preventive measures

Do not breathe dust.

(Exhaust/ventilator)

No special ventilation equipment is needed under intended use.

7.2 Storage

Conditions for safe storage

Store in a dry place.

Keep out of the reach of children.

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

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.

Section 9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical state: Powder/granule

Color: Yellow

Odor: None

Melting point/Freezing point: 110-150(Softening point)℃
Solubility:
Solubility in water: Insoluble
Density and/or relative density: 1.1-1.5g/cm3
9.2 Other information
9.2.2 Other safety characteristics
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.

Section 10. Stability and Reactivity

10.1 Reactivity
Reactivity data is not available.
10.2 Chemical stability
Stable.
10.3 Possibility of hazardous reactions
None
10.4 Conditions to avoid
Conditions to avoid data is not available.
10.5 Incompatible materials
None
10.6 Hazardous decomposition products
None

Section 11. Toxicological Information

11.1 Information on toxicological effects
Acute toxicity
Acute toxicity (Oral)
[Product data]
LD50 > 2,000mg/kg
(This was the highest attainable mass.)
Acute toxicity (Inhalation)
[Product data]
(Dust/Mists inhalation)
LC50 >5.06mg/l
(This was the highest attainable concentration.)
Irritant properties
Skin corrosion/irritation
Mildly irritating.
Serious eye damage/irritation
Mildly irritating.
Sensitization
Skin sensitization
[Data for components of the product]
Non-sensitizer
Germ cell mutagenicity
[Data for components of the product]

Ames test :Negative

Carcinogenicity

[Data for components of the product]

(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.

Reproductive toxicity data is not available.

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)

LC50 is greater than 100mg/L (fish)

EC50 is greater than 100mg/L (daphnia)

EC50 is greater than 100mg/L (Algal)

(This was the highest attainable mass.)

12.2 Persistence and degradability

Persistence and degradability data is not available.

12.3 Bioaccumulative potential

Bioaccumulative potential data is not available.

12.4 Mobility in soil

Mobility in soil data is 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

Dispose of in accordance with local, state and federal regulations.

Empty plastic container may be recycled.

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 classified as Dangerous Goods

Sea IMDG Code : Not classified as Dangerous Goods

Air ICAO-TI ,IATA-DGR : Not classified as Dangerous Goods

14.5 Environmental hazards

Marine pollutants (yes/no) : no

14.6 Special precautions for user

Special precautions for user is not applicable.

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

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.

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.