

# TOSHIBA SAFETY DATA SHEET

Date of Preparation : November 14, 2003  
Date of Revised : March 7, 2014

SDS : T3511DK10WTAP  
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## SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : T-3511D-K Black Toner  
Used for : Toshiba Copiers, e-STUDIO 281c, 351c, 451c, 3511 and 4511  
Company Name : Toshiba TEC Corporation  
Address : 1-11-1, Osaki, Shinagawa-ku, Tokyo, 141-8586, Japan  
Telephone Number : +81-3-6830-9100  
Manufacturer Name : (1) Toshiba America Business Solutions, Inc.  
Toner Products Division (Mitchell Plant)  
901 North Foster Street, Mitchell, SD. 57301-0070 U.S.A.  
(2) Toshiba TEC Information Systems (ShenZhen) Co.,Ltd  
District No. 27 Bao An  
ShenZhen China 518101

Contact : (1) Toshiba (Australia) Pty, Ltd.  
Building C 12 - 24, Talavera Road, North Ryde, NSW 2113  
Telephone. No. : +61-2-98876000 (Business hours)  
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(Poisons Information Centre)  
  
(2) Toshiba Singapore Pte Ltd  
Telephone No. : +65-6516-0380

## SECTION 2 HAZARDS IDENTIFICATION

Classification : This item is not classified as hazardous according to criteria of GHS and regulations in each country.  
Emergency Overview : If used as intended, the product does not present acute or chronic health hazard.  
Physical Hazards : This product is not classified as flammable or combustible.  
It will burn in case of fire.  
Avoid contact with strong oxidizers such as chromate, bromate and nitrates.  
Routes of Exposure : Inhalation, dermal contact, incidental ingestion  
Inhalation : Excessive inhalation may cause irritation of the nose, throat and respiratory tract.  
Eye Contact : Non-irritant.  
Dermal Contact : Non-irritant, non-sensitiser.  
Ingestion : Not currently known.  
Chronic Effects : See Section 11 Toxicological Information.  
Carcinogenicity : See Section 11 Toxicological Information.  
Reproductive/Developmental : Not identified.  
Target Organs : Prolonged breathing of high concentrations may cause adverse effects on the respiratory system.  
Signs and Symptoms of Exposure : Prolonged exposure to dusts of this product may irritate the respiratory system.  
Medical Conditions Aggravated by Exposure to this Product : Respiratory disorders, such as asthma, may be aggravated by prolonged exposure to high concentrations of this product.

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### SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT(S)</u>	<u>CAS No.</u>	<u>wt. %</u>
Polyester resin	- - -	80-90
Carbon black	1333-86-4	5-10
Wax	- - -	3-10
Amorphous Silica	7631-86-9	2 - 4
Organic Metal Complex	- - -	<2
Zinc stearate	557-05-1	<1

### SECTION 4 FIRST AID MEASURES

- Eye Contact : Immediately flush eyes with plenty of water for at least 15 minutes.  
If irritation persists, call a physician.  
: Removal of Contact Lenses after an eye injury should only be undertaken by skilled Personnel.
- Skin Contact : If contact with skin or hair occurs, wash skin and /or hair with running water (and a suitable skin cleansing product if available).  
If irritation occurs or is persistent, seek medical attention.
- Ingestion : Dilute stomach contents with several glasses of water.  
First Aid is generally not required. If in doubt, call a physician.
- Inhalation : Remove from exposure area to fresh air immediately.  
Excessive inhalation may cause irritation of the nose, throat and respiratory tract.  
Contact a physician if there is any difficulty in breathing or other signs of distress
- Notes to Physician : Treat Symptomatically.

### SECTION 5 FIRE FIGHTING MEASURES

- Extinguishing Media : There is no restriction on the type of extinguisher which may be used  
: Foam, halon, carbon dioxide, dry chemical and water fog.
- General Hazard : Product will burn in case of fire.
- Flash Point : Not applicable
- Flammable Limits : Not applicable
- Autoignition Temperature : Not applicable
- Flammability classification : Not applicable
- Fire / Explosion Hazard : Combustible powder. Solid which burns but propogates flame with difficulty.  
Dust of this product at sufficient concentrations can form explosive mixtures with  
Avoid generating dust, particularly clouds of dust in a confined or unventilated are  
as clouds of dust-air mixtures may form an explosive mixture with air and exposu  
to any source of ignition, i.e a flame or spark may result in a fire or dust explosio
- Fire Fighting Procedures : Alert Fire Brigade and tell them location and nature of hazard.  
: Wear breathing apparatus and protective gloves in the event of a fire.  
: Prevent, by any means available, spillage from entering drains or water courses.  
: Use fire fighting procedures suitable for the surrounding area.
- Hazardous Combustion Products : Carbon monoxide, carbon dioxide and other pryolysis products typical of  
burning organic material. May emit poisonous fumes.
- Fire incompatibility : Avoid contamination with oxidising agents. i.e nitrates, oxidising acids, chlorine,  
bleaches etc as ignition may result.
- HAZCHEM : None (ADG7)

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### SECTION 6 ACCIDENTAL RELEASE MEASURES

- Personal Precautions : Avoid breathing in dust, and contact with skin and eyes.  
Wear protective clothing, gloves, safety glasses and a dust respirator.
- Environmental Precautions : Do not wash away into sewers, drains or watercourses.
- Methods for Cleaning Up : Minor Spills;  
Remove any sources of ignition.  
Slowly sweep up any spilled powder onto paper and carefully transfer it into a sealable waste container. Any residue can be removed with soap and cold water.  
Fine powder can form explosive dust-air mixtures. If a vacuum cleaner is used, it must be a dust-explosion proof type with suitable filter.
- : Major spills;  
Moderate hazard. Advise personnel in the area. Contact Emergency services and advise them of the location and nature of the hazard. Control personal contact by wearing protective clothing, gloves, safety glasses and a dust respirator.  
Remove any sources of ignition.  
Prevent by any means available, spillage from entering water courses or drains.
- : Personal Protection Equipment advice is contained in Section 8 of the SDS.

### SECTION 7 HANDLING AND STORAGE

- Handling : Avoid all personal contact of toner dust including inhalation.  
: Wear protective clothing when risk of exposure occurs.  
: Use in a well ventilated area.  
: Prevent concentrations in hollows and sumps.  
: Minimise airborne dust and eliminate all sources of ignition. Keep away from heat, hot surfaces, flames or sparks.
- Prevention of Fire and Explosion : This material is capable of creating a dust explosion.  
: Keep away from heat, sparks and flame.
- Storage : Keep container in cool and dry area.
- Hygienic Practices : Avoid inhalation and ingestion. Avoid getting in eyes, on skin or clothing.  
Wash hands thoroughly after handling, and before eating, drinking, or smoking.  
: Store away from foodstuffs, foodstuff containers and incompatible materials.
- Usage : For use in Photocopiers and other multifunctional devices.

### SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

- Exposure Limits
- OSHA PELs (TWA)  
as the product : 15mg/m<sup>3</sup> (Total dust)  
5mg/m<sup>3</sup> (Respirable fraction)
- Carbon black : 3.5 mg/m<sup>3</sup>
- Other substances : Not listed
- ACGIH TLVs (TWA)  
as the product : 10mg/m<sup>3</sup> (Total dust)  
3mg/m<sup>3</sup> (Respirable fraction)
- Carbon black : 3.5 mg/m<sup>3</sup>
- Other substances : Not listed
- DFG-MAK (TWA)  
as the product : 4mg/m<sup>3</sup> (Inhalable fraction)  
1.5mg/m<sup>3</sup> (Respirable fraction)
- All substances : Not listed
- NOHSC (TWA)  
All substances : Not listed
- Engineering Controls : Maintain adequate ventilation.
- Eye Protection : Not required under intended use. In case of hazards, wear safety glasses with side shields or Chemical goggles. In the event of exposure, begin eye irrigation with water.
- Skin Protection : Not required under intended use. In case of hazards, wear gloves made from Butyl Rubber, Nitrile Rubber, Polychloroprene or use a barrier cream.
- Respiratory Protection : Not required under intended use. In case of hazards, use a particulate type of respirator (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88.2 or equivalent).
- Other Personal Protection : Overalls, PVC apron, Skin barrier cream.

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### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Fine solid powder  
Color : Black  
Scent : Odourless  
Odour Threshold : Not applicable  
pH Value : Not a water-based product, therefore not applicable.  
Melting Point : 110 - 150 degrees Celcius (Softening point)  
Freezing Point : Not applicable  
Initial Boiling point : Not available  
Boiling range : Not available  
Flash Point : Not applicable  
Evaporation Rate : Not applicable  
Flammability (solid, gas) : Not available  
Upper / Lower explosive limit : Not applicable  
Vapor Pressure : Not applicable  
Vapor Density (Air=1) : Not applicable  
Relative density (H2O=1) : 1.1 - 1.5  
Solubility in Water : Negligible  
Partition Coefficient: water : Not available  
Decomposition Temperature : Not available  
Auto ignition Temperature : Not Applicable  
Viscosity : Not Applicable

### SECTION 10 STABILITY AND REACTIVITY

Reactivity : Stable  
Chemical Stability : Stable under normal handling conditions.  
Incompatible Materials : Not identified.  
Hazardous Polymerization: : Will not occur.  
Conditions to avoid : Heat, hot surfaces, flames or sparks.  
Incompatible Materials : Not identified  
Hazardous Decomposition pr : Carbon monoxide and carbon dioxide.

### SECTION 11 TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50 is greater than 2,500mg/kg.  
(This was the highest attainable mass.)  
Acute inhalation : LC50(4H) is in excess of 5.18mg/l.  
(This was the highest attainable concentration.)  
Eye irritation : Non-irritant.  
Skin irritation : Non-irritant.  
Skin sensitization : Non-sensitiser.  
Mutagenicity : Negative in the Ames test.  
Carcinogenicity : : In 1996, the IARC classified carbon black as a Group 2B carcinogen  
(possible human carcinogen).  
Reproductive Toxicity : Not Available.  
Specific Target Organ Toxicit : Single Exposure : Not Available  
: Repeated Exposure : Not Available  
Aspiration hazard : Not Available.  
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 (4 mg/m3) exposure gr  
These findings are attributed to "lung overloading", a general response to excess amounts of any dust retained in the lungs for a prolonged period.

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### SECTION 12 ECOLOGICAL INFORMATION

Aquatic environment : LC50 is greater than 1000mg/L (fish)  
: EC50 is greater than 1000mg/L (daphnia)  
(This was the highest attainable mass.)

#### Ecotoxicity of ingredient

Amorphorous Silica	: Persistence Water/Soil	Low
	Persistence Air	No Data Available
	Bioaccumulation	Low
	Mobility	High
Carbon Black	: Persistence Water/Soil	No Data Available
	Persistence Air	No Data Available
	Bioaccumulation	No Data Available
	Mobility	No Data Available

### SECTION 13 DISPOSAL CONSIDERATION

Recycle wherever possible.

Empty plastic container may be recycled.

Dispose of by burial in a land-fill specifically licenced to accept chemical wastes, or incineration in a licenced apparatus (after admixture with suitable combustible material).

Do not allow wash water from cleaning to enter drains or water courses.

DO NOT put toner or toner container into fire as heated toner may cause severe burns.

DO NOT shred or dismantle a toner container as finely dispersed particles can form explosive and inhalable mixtures in the air. Excessive inhalation may cause irritation of the nose, throat and respiratory tract.

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

Confirm disposal procedures with appropriate authorities.

### SECTION 14 TRANSPORTATION INFORMATION

HAZCHEM : None (ADG7)

#### International Transport Information

UN Classification Number : Not applicable

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

Not regulated for transport of Dangerous Goods: ADG7, IMDG, IATA.

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### SECTION 15 REGULATORY INFORMATION

Poisons Schedule : None.  
IARC : See section 11.

#### US/Canada Information

OSHA Hazard Communication Standard, 29CFR 1910. 1200

: Not regulated.

Toxic Substance Control Act (TSCA)

: All chemical substances in this product comply with all applicable rules or orders under TSCA.

RCRA (40 CFR 261) : Product or components not listed.

CERCLA/SARA Informatio : Not regulated.

NTP Annual Report on Carcinogens

: Not listed as an NTP carcinogen.

California Proposition 65 : Neither toner, or any of the components, are listed as chemicals known to the State of California to cause cancer or reproductive system effects.

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

Other State Regulations : Carbon black is listed in the New Jersey Right to Know List, Pennsylvania Hazardous Substance List, and Massachusetts Substance List.

U.S./Canada Label Statements

: LOW HAZARD FOR RECOMMENDED HANDLING. Minimize dust generation and accumulation. Use with adequate ventilation.

#### EU Information

Label Information According to Directives 67/548 EEC & 1999/45 EC

Symbol & Indication : Not required

Risk Phrase : Not required

Safety Advise Phrase : Not required

76/769/EEC : All chemical substances in this product comply with all applicable rules or order under 76/769/EEC.

National requirement : : No specific regulations or restrictions.

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.

Not classified as a Dangerous Good by the criteria of the ADG Code.

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## SECTION 16 OTHER INFORMATION

National Fire Protection Association (NFPA) Classification :

Flammability : 1  
Reactivity : 0  
Health : 0  
( 0 = insignificant, 1 = slight )

Hazardous Materials Information Systems (HMIS) :

Red (Flammability) : 1  
Yellow (Reactivity) : 0  
Blue (Acute Effects) : 0  
( 0 = insignificant, 1 = slight )

Notice : Judgments as to the suitability of information herein for purchaser's purposes are necessarily purchaser's responsibility. Therefore, although reasonable care has been taken in the preparation of such information, Toshiba Corporation extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

References : IARC (1996) IARC Monographs on the Evaluation of the Carcinogenic Risks of Chemicals to Humans, Vol. 65, Printing Processes and Printing Inks, Carbon Black and Some Nitro Compounds, Lyon, pp. 149-261.  
H. Muhle, B. Bellmann, O. Creutzenberg, C. Dasenbrock, H. Ernst, R. Kilpper, J. C. MacKenzie, P. Morrow, U. Mohr, S. Takenaka, and R. Mermelstein (1991).  
Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats, Fundamental and Applied Toxicology 17, pp. 280-299.

Abbreviation : (1) OSHA PEL stands for Permissible Exposure Limit under Occupational Safety and Health Administration (USA).  
(2) ACGIH TLV stands for Threshold Limit Value under American Conference of Governmental Industrial Hygienists (USA).  
(3) DFG-MAK stands for Maximale Arbeitsplatzkonzentrationen under Deutsche Forschungsgemeinschaft.  
(4) TWA stands for Time Weighted Average.  
(5) IARC stands for International Agency for Research on Cancer.  
(6) NTP stands for National Toxicology Program (USA).  
(7) NIOSH stands for National Institute for Occupational Safety and Health (USA).  
(8) DOT stands for Department of Transportation (USA).  
(9) NOHSC stands for National Occupational Health and Safety Commission (Australia).  
(10) GHS stands for Globally Harmonised System of Classification and Labelling of Chemicals.  
(11) ADG stands for Australian Dangerous Goods.

Changes from previous versions:

Revision date March 7, 2014

Items required by GHS were added.