Date of issue : 17/02/2020

Safety Data Sheet

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

1.1 Product identifier:

Product name: DEV-H44X-K
e-STUDIO330AC/400AC
SDS NO. DEVH44XKW-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 TEC Canada Business Solutions Inc.
75 Tiverton Court, Markham, Ontario, L3R 4M8
Telephone No.+1-905-470-3500
For calls within Canada only.

Toshiba TEC Germany Imaging Systems GmbH
Telephone No.+49-2131-1245-0
(European Headquarters)
Emergency telephone No. +1-703-527-3887 (collect calls accepted) (CHEMTREC)

Toshiba Australia Pty, Ltd.
Building C 12-24, Talavera Road, North Ryde, NSW 2113
Telephone No.+61-2-98876000(Business hours)
Ph 13 11 26(After hours,Australia)
(Poisons Information Centre)

Toshiba Tec Information Systems (ShenZhen) Co., Ltd.
Emergency Telephone No. +86-755-27311901
For calls within China only.

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

Taishiba International Co. Ltd.
Telephone No.+866-2-25163388 Ext.2750
For calls within Taiwan 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 classification
Acute toxicity (Inhalation):Out of classification
Skin corrosion/irritation: Out of classification
Eye damage/eye irritation : Out of classification
Skin sensitization: Out of classification

ENVIRONMENT HAZARDS

Hazardous to the aquatic environment (Acute):Out of classification

2.2 Label elements

No GHS label element
No Signal word

3. Composition/information on ingredients

Mixture/Substance selection:
Mixture

Ingredient name	Content (%)	CAS No.
Ceramic materials and wares, chemicals (Ferrite)	>90	66402-68-4
Polyester resin	<10	-----
Carbon black	0.1 - 1	1333-86-4
Amorphous silica	0.1 - 1	7631-86-9

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

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 reach of children.

7.3 Specific end use(s)

Developer for electrophotographic equipment

8. Exposure controls/personal protection

8.1 Control parameters

ACGIH

(Carbon black)

ACGIH(2010) TWA: 3mg/m3(I)

OSHA-PEL

(Carbon black)

TWA 3.5mg/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 state: Powder/granule
Color: Black
Odor: None
Density and/or relative density: 4.5-5.5g/cm3
Solubility:
Solubility in water: Insoluble

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

11. Toxicological Information

11.1 Information on toxicological effects
Acute toxicity
Acute toxicity (Oral), Product
LD50 > 2,000mg/kg
(This was the highest attainable mass.)
Acute toxicity (Gases inhalation), Product
LC50 >5.05mg/l
(This was the highest attainable concentration.)
Irritant properties
Skin corrosion/irritation
Mild irritant.
Serious eye damage/irritation
Minimal irritant.
Sensitization
Skin sensitization
Non-sensitizer
Germ cell mutagenicity
Ames test :Negative
Carcinogenicity
(Carbon black)
The IARC classified carbon black as a Group 2B carcinogen(possible human carcinogen).
But carcinogenicity was not observed with toner containing carbon black in chronic rat inhalation study.
Reproductive toxicity data is not available.
STOT
STOT-single 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.

Aspiration hazard data is not available.

12. Ecological Information

12.1 Ecotoxicity

Aquatic toxicity

Aquatic acute toxicity component(s) data

LC50	greater than	100mg/l	(fish)
EC50	greater than	100mg/l	(daphnia)
EC50	greater than	100mg/l	(Algal)

(This is estimated by constituent components.)

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 Other adverse effects

Ozone depleting chemical data is not available.

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.

14. Transport Information

Not applicable to UN No., UN CLASS

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

MARPOL Annex III - Prevention of pollution by harmful substances

Marine pollutants (yes/no) :no

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.

16. Other information

Reference Book

Globally Harmonized System of classification and labelling of chemicals, (6th ed., 2015), UN
Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN
Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012)
2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)
2019 TLVs and BEIs. (ACGIH)
http://monographs.iarc.fr/ENG/Classification/index.php
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)

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 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.