

Safety Data Sheet

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

1.1 Product identifier:

Product name: D-2309

e-STUDIO2303AM , e-STUDIO2803AM , e-STUDIO2309A , e-STUDIO2809A , e-STUDIO2323AM , e-STUDIO2823AM ,
e-STUDIO2329A , e-STUDIO2829A , e-STUDIO2802AM , e-STUDIO2802AF , e-STUDIO2822AM , e-STUDIO2822AF

SDS NO. D2309EN-1

1.2 Relevant identified uses of the substance or mixture and uses advised against

Developer 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.

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

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

2.2 Label elements

No GHS label element

No Signal word

PRECAUTIONARY STATEMENT

Prevention

Avoid release to the environment.

Disposal

Refer to manufacturer/supplier for information on disposal/recovery/recycling.

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.	EC No.
Ceramic materials and wares, chemicals (Ferrite)	>90	66402-68-4	266-340-9
Polyester resin	2-6	-----	-----
Carbon black	0.1 - 1	1333-86-4	215-609-9
Amorphous silica	0.1 - 1	7631-86-9	231-545-4

----- 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.

4.2 Most important symptoms and effects, both acute and delayed

Specific information on symptom and effect are unknown.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

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.

6.4 Reference to other sections

Refer to section 13

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 reach of children.

7.3 Specific end use(s)

Developer for electrophotographic equipment

Section 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)

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: Black

Odor: Slight odor

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
- n-Octanol/water partition coefficient: Not applicable
- Vapor pressure data is not available.
- Density and/or relative density: 4.5-5.5g/cm³
- Particle characteristics:
- Size distribution (range): <60μm

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]
 - (Gases inhalation)
 - LC50 > 5.16mg/l
 - (This was the highest attainable concentration.)
 - Irritant properties
 - Skin corrosion/irritation
 - Non-irritant.
 - Serious eye damage/irritation
 - Non-irritant.
 - 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]
 - (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.
 - 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 (16mg/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)

Aquatic environment

: LC50 >100mg/l (fish)

: EC50 >100mg/l(daphnia)

(There were the highest attainable mass.)

(Estimated from the constituent components.)

: EbC50 >100mg/l(Algal)

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

This product contains synthetic polymer microparticles. Toner or developer falls under synthetic polymer microparticles. To prevent toner and developer from being released into the environment, please follow the instructions in the manual and do not dispose of them as municipal waste or flush them into drains, which will help prevent potential negative consequences for the environment and human health. For more detailed information about the take-back and recycling of this product please contact your supplier where you purchased the product.

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.

Other regulatory information

Toner or developer falls under the category of synthetic polymer microparticles under

Regulation (EC) No 1907/2006(REACH), Annex XVII entry 78.

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.