

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade code:

Mixture identification: Trade name:

DOUBLE TONER CARTRIDGE PACK(BLACK) S050594 C13S050594

1.2. Relevant identified uses of the substance or mixture and uses advised against Recommended use:

Toner for electrophotographic printing

1.3. Details of the supplier of the safety data sheet Company:

> EPSON EUROPE B.V. Azie building, Atlas ArenA, Hoogoorddreef 5,1101 BA Amsterdam Zuidoost The Netherlands Phone number: +31-20-314-5000 Competent person responsible for the safety data sheet: chemicals@epson.eu

Date:	24/08/2023
D · ·	4.0

Revision: 1.0 1.4. Emergency telephone number Phone number: +31-20-314-5000

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture
 - EC regulation criteria 1272/2008 (CLP)

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

- No other hazards
- 2.2. Label elements

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP). Hazard pictograms:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

None

Special provisions according to Annex XVII of REACH and subsequent amendments: None

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1% Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

- 3.1. Substances
 - No
- 3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

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Qty Name		Ident. Number		Classification	
75 ~ 85 %	Styrene / acrylic resin			The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).	
10 ~ 20 %	Wax			The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).	
1 ~ 10 %	Carbon black	CAS: EC:	1333-86-4 215-609-9	The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).	

SECTION 4: First aid measures

- 4.1. Description of first aid measures
 - In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

- 4.2. Most important symptoms and effects, both acute and delayed None
- 4.3. Indication of any immediate medical attention and special treatment needed Treatment:

None

SECTION 5: Firefighting measures

- 5.1. Extinguishing media
 - Suitable extinguishing media:
 - Water.
 - Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:

- None in particular.
- 5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

- Burning produces heavy smoke.
- 5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures Wear personal protection equipment. Remove persons to safety.
 - See protective measures under point 7 and 8.
- 6.2. Environmental precautions
 - Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose it.



In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Sweep away with a broom, or wipe with waste wet with soapy water.

Do not vacuum-clean up spilled toner. (When a vacuum cleaner is used, the inside of the vacuum cleaner is filled with the fine particle toner, and there is a risk of ignition or explosion due to the spark)

- Wash with plenty of water.
- 6.4. Reference to other sections See also section 8 and 13

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
 - Avoid contact with skin and eyes, inhalation of vapours and mists. See also section 8 for recommended protective equipment. Advice on general occupational hygiene: Do not eat or drink while working.
- 7.2. Conditions for safe storage, including any incompatibilities Keep away from food, drink and feed. Incompatible materials: None in particular. Instructions as regards storage premises: Adequately ventilated premises.
- 7.3. Specific end use(s) None in particular

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
 - OEL Type: JSOH TWA: 2 mg/m3 Notes: as Class 3 Dusts (Respirable dust)
 - OEL Type: JSOH TWA: 8 mg/m3 Notes: as Class 3 Dusts (Total dust)
 - OEL Type: ACGIH TWA: 3 mg/m3 Notes: as Respirable particles
 - OEL Type: ACGIH TWA: 10 mg/m3 Notes: as Inhalable particles
 - Wax
- OEL Type: ACGIH TWA(8h): 2 mg/m3
- OEL Type: OSHA TWA: 2 mg/m3
- Carbon black CAS: 1333-86-4
 - OEL Type: ACGIH TWA(8h): 3 mg/m3
 - OEL Type: OSHA TWA: 3.5 mg/m3
 - OEL Type: JSOH TWA: 1 mg/m3 Notes: as Class 2 Dusts (Respirable dust)
 - OEL Type: JSOH TWA: 4 mg/m3 Notes: as Class 2 Dusts (Total dust)
- Notes: as total dust
- DNEL Exposure Limit Values
 - No data available
- **PNEC Exposure Limit Values**
- No data available
- 8.2. Exposure controls
 - 8.2.1. Appropriate engineering controls:
 - None
 - 8.2.2. Individual protection measures, such as personal protective equipment Eye protection:
 - Use personal protective equipment as required.
 - Protection for skin:
 - Use personal protective equipment as required.

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Protection for hands: Use personal protective equipment as required. Respiratory protection: Use personal protective equipment as required. Thermal Hazards: None 8.2.3. Environmental exposure controls: None Appropriate engineering controls: None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemic	cal properties	
Physical state:	Powder	
Colour:	Black	
Odour:	Slightly	
Melting point / freezing point:	No data available	
Boiling point or initial boiling point and l	boiling range:	
	No data available	
Lower and upper explosion limit:	No data available	
Flash point:	Not Relevant	
Auto-ignition temperature:	No data available	

No data available Not Relevant

No data available

No data available

No data available

Specific gravity (relative density)

Not Relevant

Insoluble

1.2

Flash point: Auto-ignition temperature: Decomposition temperature: pH: Kinematic viscosity: Solubility in water: Vapour pressure: Density and/or relative density:

Relative vapour density: Particle characteristics: Particle size:

9.2. Other information No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions 10.2. Chemical stability

- Stable under normal conditions
- 10.3. Possibility of hazardous reactions None
- 10.4. Conditions to avoid Stable under normal conditions.
- 10.5. Incompatible materials None in particular.
- 10.6. Hazardous decomposition products None.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 Toxicological information of the product:a) acute toxicity:

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Test: LD50 - Route: Oral - Species: Rat > 2500 mg/kg

Test: LC50 - Route: Inhalation Dust - Species: Rat > 5.1 mg/l - Duration: 4h b) skin corrosion/irritation:

- Test: Skin Irritant Species: Rabbit Non-irritant
- c) serious eye damage/irritation:
 - Test: Eye Irritant Species: Rabbit Non-irritant
- d) respiratory or skin sensitisation:
 - Test: Skin Sensitisation Route: Maximisation Assay Species: Guinea pig Non-sensitiser
- e) germ cell mutagenicity:

Test: Mutagenesis - Species: Salmonella Typhimurium and Escherichia coli Negative

f) carcinogenicity:

Components do not come under carcinogens (Ref. 2), except for Carbon black g) reproductive toxicity:

Does not contain reproductive toxicity and developmental toxic substances (Ref. 3)

i) STOT-repeated exposure:

Prolonged inhalation of excessive dust may cause lung damage. It is attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. Use of this product, as intended, does not result in inhalation of excessive dust.

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 rats in the high concentration (16mg/m3) exposure group, and a minimal to mid degree of fibrosis was noted in 22% of the animals in the middle (4mg/m3) exposure group. But no pulmonary change was reported in the lowest (1mg/m3) exposure group, the most relevant level to potential human exposures.(Ref. 4)

Toxicological information of the main substances found in the product:

Carbon black - CAS: 1333-86-4

In 1996 the IARC reevaluated carbon black as a Group 2B carcinogen (possible human carcinogen). This evaluation is given to carbon black for which there is inadequate human evidence, but sufficient animal evidence. The latter is based upon the development of lung tumors in .rats receiving chronic inhalation exposures to free carbon black at levels that induce particle overload of the lung. Studies performed in mice have not demonstrated an association between carbon black and lung tumors. Moreover, a two-year cancer bioassay using a typical toner preparation containing carbon black demonstrated no association between toner exposure and tumor development in rats.

If not differently specified, the information required in Regulation (EU)2020/878 listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%



SECTION 12: Ecological information

- 12.1. Toxicity
 - Adopt good working practices, so that the product is not released into the environment. Toxicological information of the product:
 - No data available
 - Toxicological information of the main substances found in the product:
 - No data available
- 12.2. Persistence and degradability No data available
- 12.3. Bioaccumulative potential
 - No data available
- 12.4. Mobility in soil
 - No data available
- 12.5. Results of PBT and vPvB assessment vPvB Substances: None - PBT Substances: None
- 12.6. Endocrine disrupting properties No endocrine disruptor substances present in concentration >= 0.1%
- 12.7. Other adverse effects None

SECTION 13: Disposal considerations

- 13.1. Waste treatment methods
 - Recover if possible. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

- 14.1. UN number or ID numberNot classified as dangerous in the meaning of transport regulations.14.2. UN proper shipping name
 - No data available
- 14.3. Transport hazard class(es) No data available
- 14.4. Packing group
 - No data available
- 14.5. Environmental hazards
 - No data available
- 14.6. Special precautions for user No data available
- 14.7. Maritime transport in bulk according to IMO instruments No data available

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work) Dir. 2000/39/EC (Occupational exposure limit values) Regulation (EC) n. 1907/2006 (REACH) Regulation (EC) n. 1272/2008 (CLP) Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013 Regulation (EU) n. 2020/878 Regulation (EU) n. 286/2011 (ATP 2 CLP) Regulation (EU) n. 618/2012 (ATP 3 CLP) Regulation (EU) n. 487/2013 (ATP 4 CLP)



Regulation (EU) n. 944/2013 (ATP 5 CLP) Regulation (EU) n. 605/2014 (ATP 6 CLP) Regulation (EU) n. 2015/1221 (ATP 7 CLP) Regulation (EU) n. 2016/918 (ATP 8 CLP) Regulation (EU) n. 2016/1179 (ATP 9 CLP) Regulation (EU) n. 2017/776 (ATP 10 CLP) Regulation (EU) n. 2018/669 (ATP 11 CLP) Regulation (EU) n. 2018/1480 (ATP 13 CLP) Regulation (EU) n. 2019/521 (ATP 12 CLP) Regulation (EU) n. 2020/217 (ATP 14 CLP) Regulation (EU) n. 2020/1182 (ATP 15 CLP) Regulation (EU) n. 2021/643 (ATP 16 CLP) Regulation (EU) n. 2021/849 (ATP 17 CLP) Regulation (EU) n. 2022/692 (ATP 18 CLP) Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications: Restrictions related to the product: No restriction. Restrictions related to the substances contained: **Restriction 75** Where applicable, refer to the following regulatory provisions : Directive 2012/18/EU (Seveso III) Regulation (EC) nr 648/2004 (detergents). Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III): Seveso III category according to Annex 1, part 1 None

15.2. Chemical safety assessment No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

This safety data sheet has been completely updated in compliance to Regulation 2020/878.

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

Ref. 1 •Measures to prevent dust explosion: p. 98 - p. 105 (Japan Industrial Safety and Health Association)

Ref. 2 ·IARC Monographs on the Evaluation Carcinogenic Risks to Humans (IARC: International Agency for Research on Cancer)
·Journal of Occupational Health (JOH) (Japan Society of Occupational Health (JSOH))
·TLVs and BEIs (ACGIH: American Conference of Governmental Industrial Hygienists)
·IRIS Carcinogenic Assessment (IRIS: Integrated Risk Information System of US EPA)
·National Toxicology Program (NTP) Report on Carcinogens (USA)
·Annex VI of REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and

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packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 •MAK und BAT Werte Liste (DFG: German Research Foundation) •TRGS 905, Verzeichnis krebserzeugender, keimzell mutagener oder reproduktionstoxischer Stoffe (AGS: Committee on Hazardous Substances, Germany) •Annex VI of REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT

- Ref. 3 •Annex VI of REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 •TRGS 905, Verzeichnis krebserzeugender, keimzell mutagener oder reproduktionstoxischer Stoffe (AGS: Committee on Hazardous Substances, Germany)
- Ref. 4 ·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)

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This Safety Data Sheet cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS: GefStoffVO:	European Inventory of Existing Commercial Chemical Substances. Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Áviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.