

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

- 1.1. Product identifier
 - Mixture identification: Trade name:

Ribbon cartridge, S015356 / ERC18B

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

Ink ribbon for 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-europe.com Date: 07/03/2017 Revision: 1.0 1.4. Emergency telephone number Phone number: +31-20-314-5000 Giftnotruf Berlin: +48 (0) 30 30686 790

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 vPvB Substances: None - PBT Substances: None

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:

Qty	Name	Ident. Number	Classification	
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40% ~ 55%	Ester oils	CAS:	Trade secret	The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
20% ~ 35%	Fatty acids	CAS:	Trade secret	The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
20% ~ 30%	Colorant	CAS:	Trade secret	The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
~ 5%	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.

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- 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
 - 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.
 Do not eat or drink while working.
 See also section 8 for recommended protective equipment.
- 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
 - Carbon black CAS: 1333-86-4
 - OEL Type: ACGIH LTE: 3 mg/m3
 - OEL Type: OSHA LTE: 3.5 mg/m3
 - **DNEL Exposure Limit Values**
 - No data available
 - PNEC Exposure Limit Values
 - No data available
- 8.2. Exposure controls
 - Eye protection:

Not needed for normal use. Anyway, operate according good working practices. Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Not needed for normal use.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

- Environmental exposure controls:
 - None
- Appropriate engineering controls:
 - None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties Appearance and colour: Nylon 66 fabric with black ink Odour: Slightly

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Odour threshold: pH: Melting point / freezing point: Initial boiling point and boiling range: Solid/gas flammability: Upper/lower flammability or explosive limits: Vapour density: Flash point: Evaporation rate: Vapour pressure: Solubility in water: Solubility in oil: Partition coefficient (n-octanol/water): Auto-ignition temperature: Decomposition temperature: Viscosity: Explosive properties: Oxidizing properties: 9.2. Other information Miscibility:

No data available No data available

No data available No data available No data available

SECTION 10: Stability and reactivity

Fat Solubility:

Conductivity:

- 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 toxicological effects
 - Toxicological information of the mixture:
 - e) germ cell mutagenicity:

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

- f) carcinogenicity:
- Components do not come under carcinogens (Ref. 1), except for Carbon black g) reproductive toxicity:

Does not contain reproductive toxicity and developmental toxic substances (Ref. 2)

Toxicological information of the main substances found in the mixture:

Carbon black - CAS: 1333-86-4

a) acute toxicity:

Test: LD50 - Route: Dermal - Species: Rabbit > 3 g/kg - Source: Acute Toxicity Data. Journal of the American College of Toxicology, Part B. Vol. 15

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Test: LD50 - Route: Oral - Species: Rat > 15400 mg/kg - Source: Acute Toxicity Data. Journal of the American College of Toxicology, Part B. Vol. 15 Carbon black - CAS: 1333-86-4

With excessive exposure, carbon black has been listed as a possible human carcinogen. However, as engineered within this ink cartridge, emissions to air of carbon black during normal printing use have not been found. IARC, the International Agency for Research on Cancer, has found printing inks to be not classifiable as human carcinogens.

If not differently specified, the information required in Regulation (EU) 2015/830 listed below must be considered as 'No data available':

- 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.

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment. 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. 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
 - Not 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

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No data available

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 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) 2015/830 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) 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: No restriction. Where applicable, refer to the following regulatory provisions : Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments. Regulation (EC) nr 648/2004 (detergents). 1999/13/EC (VOC directive)

Provisions related to directives 82/501/EC(Seveso), 96/82/EC(Seveso II): No data available

15.2. Chemical safety assessment

No

SECTION 16: Other information

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

CCNL - Appendix 1

Ref. 1 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

•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 •MAK und BAT Werte Liste (DFG: German Research Foundation)

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•TRGS 905, Verzeichnis krebserzeugender, keimzell mutagener oder reproduktionstoxischer Stoffe (AGS: Committee on Hazardous Substances, Germany)

Ref. 2 •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)

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.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	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.
LTE:	Long-term exposure.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day.
	(ACGIH Standard).
WGK:	German Water Hazard Class.