

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

- 1.1. Product identifier  
Mixture identification:  
Trade name: RIBBON,S015337(B)  
Trade code: C13S015337
- 1.2. Relevant identified uses of the substance or mixture and uses advised against  
Recommended use:  
Dot Impact 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: 07/03/2023  
Revision: 4.0
- 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  $\geq 0.1\%$   
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:

Qty	Name	Ident. Number	Classification
30% ~ 40%	Ester oils		The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
25% ~ 30%	Fatty acids		The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
12.5% ~ 15%	Dyestuffs		The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
5% ~ 7%	Sorbitan Sesquioleate	CAS: 8007-43-0	The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
0.25% ~ 0.5%	Carbon black	CAS: 1333-86-4 EC: 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 (CO<sub>2</sub>).

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
  - 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
  - Carbon black - CAS: 1333-86-4
    - OEL Type: ACGIH - TWA(8h): 3 mg/m<sup>3</sup>
    - OEL Type: OSHA - TWA: 3.5 mg/m<sup>3</sup>
    - OEL Type: JSOH - TWA: 1 mg/m<sup>3</sup> - Notes: as Class 2 Dusts (Respirable dust)
    - OEL Type: JSOH - TWA: 4 mg/m<sup>3</sup> - 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.
    - 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 chemical properties

##### About applying ink

Physical state:	Liquid	
Colour:	Black	
Odour:	Slightly	
Melting point / freezing point:	No data available	
Boiling point or initial boiling point and boiling range:	No data available	
Lower and upper explosion limit:	No data available	
Flash point:	220 °C / 428 ° F	(Cleveland open cup method, JIS K2265-4)
Auto-ignition temperature:	No data available	
Decomposition temperature:	No data available	
pH:	Not Relevant	
Kinematic viscosity:	No data available	
Solubility in water:	Insoluble	
Vapour pressure:	No data available	
Density and/or relative density:	1.0	Specific gravity (relative density)
Relative vapour density:	No data available	
Particle characteristics:	Not Relevant	

#### 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:

##### 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 product:

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

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

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  $\geq$  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  $\geq$  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 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  
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 (EC) n. 2021/849 (ATP 17 CLP)
  - Regulation (EC) 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

Paragraphs modified from the previous revision:

SECTION 1: Identification of the substance/mixture and of the company/undertaking  
SECTION 3: Composition/information on ingredients  
SECTION 15: Regulatory 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

- 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 (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  
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)
- 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  
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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:	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 Aviation 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.