

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

- 1.1. Product identifier  
Mixture identification:  
Trade name: Ink Cartridge,WH,600,EC, T891A  
Trade code: C13T891A00
- 1.2. Relevant identified uses of the substance or mixture and uses advised against  
Recommended use:  
Ink for inkjet 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: 14/1/2016  
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  
N.A.
- 3.2. Mixtures

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

Qty	Name	Ident. Number	Classification
65% ~ 80%	1-ethoxy-2-(2-methoxyethoxy)ethane	CAS: 1002-67-1 EC: 213-690-5	The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
12.5% ~ 15%	Titanium dioxide	CAS: 13463-67-7 EC: 236-675-5	substance with a Community workplace exposure limit
5% ~ 7%	(2-Methoxymethylethoxy)propanol	CAS: 34590-94-8	The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
1% ~ 3%	gamma-Butyrolactone	CAS: 96-48-0 EC: 202-509-5	The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
1% ~ 3%	Silica	CAS: 63231-67-4	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.
  - 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
  - Titanium dioxide - CAS: 13463-67-7
    - TLV TWA - 10 mg/m<sup>3</sup>
    - DNEL Exposure Limit Values
      - N.A.
    - PNEC Exposure Limit Values
      - N.A.
- 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:                        | White Liquid |          |
| Odour:  | Slightly     |          |
| Odour threshold:                              | N.A.         |          |
| pH:   | Not Relevant |          |
| Melting point / freezing point:               | N.A.         |          |
| Initial boiling point and boiling range:      | N.A.         |          |
| Solid/gas flammability:                       | N.A.         |          |
| Upper/lower flammability or explosive limits: |              | N.A.     |
| Vapour density:                               | N.A.         |          |
| Flash point:                                  | 65 °C        |          |
| Evaporation rate:                             | N.A.         |          |
| Vapour pressure:                              | N.A.         |          |
| Relative density:                             | N.A.         |          |
| Solubility in water:                          | Soluble      |          |
| Solubility in oil:                            | N.A.         |          |
| Partition coefficient (n-octanol/water):      | N.A.         |          |
| Auto-ignition temperature:                    | N.A.         |          |
| Decomposition temperature:                    | N.A.         |          |
| Viscosity:                                    | < 5 mPa·s    | at 20 °C |
| Explosive properties:                         | N.A.         |          |
| Oxidizing properties:                         | N.A.         |          |
- 9.2. Other information
- |                 |      |
|-----------------|------|
| Miscibility:    | N.A. |
| Fat Solubility: | N.A. |
| Conductivity:   | N.A. |

**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 toxicological effects
- Toxicological information of the mixture:  
Ink
- e) germ cell mutagenicity:  
Test: Mutagenesis - Species: Salmonella Typhimurium and Escherichia coli  
Negative
- Toxicological information of the main substances found in the mixture:  
1-ethoxy-2-(2-methoxyethoxy)ethane - CAS: 1002-67-1
- a) acute toxicity:  
Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg

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- Test: LD50 - Route: Dermal - Species: Rat > 2000 mg/kg
- b) skin corrosion/irritation:  
Test: Skin Irritant - Route: Dermal - Species: Rabbit Negative
- c) serious eye damage/irritation:  
Test: Eye Irritant - Species: Rabbit Negative
- e) germ cell mutagenicity:  
Test: Mutagenesis - Species: Salmonella Typhimurium Negative
- g) reproductive toxicity:  
Test: Reproductive Toxicity - Route: Oral - Species: Rat Negative

Titanium dioxide - CAS: 13463-67-7

Titanium dioxide is classified as "possibly carcinogenic to human" (Group 2B). In animal chronic inhalation studies, the tumor formulation observed in only rats with animal chronic inhalation study are 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. Epidemiological study to date have not revealed any evidence of the relation between exposure to titanium dioxide and diseases of the respiratory tract beyond general effects of dust.

If not differently specified, the information required in Regulation 453/2010/EC 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.

### SECTION 12: Ecological information

#### 12.1. Toxicity

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

1-ethoxy-2-(2-methoxyethoxy)ethane - CAS: 1002-67-1

##### a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Algae > 89.5 mg/l - Duration h: 96

Endpoint: LC50 - Species: Daphnia > 93.6 mg/l - Duration h: 48

Endpoint: LC50 - Species: Fish > 90.8 mg/l - Duration h: 96

#### 12.2. Persistence and degradability

N.A.

#### 12.3. Bioaccumulative potential

N.A.

#### 12.4. Mobility in soil

N.A.

#### 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

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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  
N.A.
- 14.3. Transport hazard class(es)  
N.A.
- 14.4. Packing group  
N.A.
- 14.5. Environmental hazards  
N.A.
- 14.6. Special precautions for user  
N.A.
- 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code  
N.A.

### 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:  
Restriction 40  
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):  
N.A.
- 15.2. Chemical safety assessment  
No

### SECTION 16: Other information

This safety data sheet has been completely updated in compliance to Regulation 2015/830.  
This document was prepared by a competent person who has received appropriate training.  
Main bibliographic sources:

## Safety Data Sheet

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

Insert further consulted bibliography

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 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.
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.