

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

- 1.1. Product identifier  
Mixture identification:  
Trade name: Ink Supply Unit, T45L2
- 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.eu  
Date: 08/04/2020  
Revision: 3.0
- 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:  
EUH210 Safety data sheet available on request.  
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  
Ingredient(s) with unknown acute toxicity:  
3.6% of the mixture consists of ingredient(s) of unknown acute inhalation toxicity.

**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                                                                         |
|----------------|------------------------------------|---------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 65% ~<br>80%   | 1-ethoxy-2-(2-methoxyethoxy)ethane | CAS: 1002-67-1<br>EC: 213-690-5<br>REACH No.: 01-21202835<br>43-53  | The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP). |
| 10% ~<br>12.5% | gamma-Butyrolactone                | CAS: 96-48-0<br>EC: 202-509-5<br>REACH No.: 01-21194718<br>39-21    | The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP). |
| 5% ~ 7%        | (2-Methoxymethylethoxy)propanol    | CAS: 34590-94-8<br>EC: 252-104-2<br>REACH No.: 01-21194500<br>11-60 | Substance with a Union workplace exposure limit.                                       |

#### 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 spray, dry chemical, carbon dioxide or alcohol-resistant foam.

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

(2-Methoxymethylethoxy)propanol - CAS: 34590-94-8

- OEL Type: ACGIH - TWA(8h): < 0.05 % - STEL: < 0.05 %

- OEL Type: EU - TWA(8h): 308 mg/m<sup>3</sup>, 50 ppm

DNEL Exposure Limit Values

No data available

PNEC Exposure Limit Values

No data available

8.2. Exposure controls

8.2.1. Appropriate engineering controls:

Provide a good standard of general ventilation. Use powered wall- or window-mounted fans to supply fresh air - five to ten air changes per hour, with a through draught.

8.2.2. Individual protection measures, such as personal protective equipment

Eye protection:

Wear eye protection, if there is a risk of material splashing under work.

Protection for skin:

Use chemical protective clothes if there is a risk of splashing the material under work.

Protection for hands:

Use chemical protective gloves where there is a risk of skin contact under working, e.g. single-use NBR (nitrile rubber) gloves 0.2 mm thick are acceptable.  
Do not exceed the breakthrough time or reuse.

Respiratory protection:

Use personal protective equipment as required.

Thermal Hazards:

None

8.2.3. Environmental exposure controls:

None

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|                                               |                                                    |
|-----------------------------------------------|----------------------------------------------------|
| Appearance and colour:                        | Cyan Liquid                                        |
| Odour:                                        | Slightly                                           |
| Odour threshold:                              | No data available                                  |
| pH:                                           | Not Relevant                                       |
| Melting point / freezing point:               | No data available                                  |
| Initial boiling point and boiling range:      | No data available                                  |
| Solid/gas flammability:                       | No data available                                  |
| Upper/lower flammability or explosive limits: | No data available                                  |
| Vapour density:                               | No data available                                  |
| Flash point:                                  | 65.5 °C / 150 ° F (closed cup method, ASTM D 3278) |
| Evaporation rate:                             | No data available                                  |
| Vapour pressure:                              | No data available                                  |
| Relative density:                             | 0.98 at 20 °C                                      |
| Solubility in water:                          | Soluble                                            |
| Solubility in oil:                            | No data available                                  |
| Partition coefficient (n-octanol/water):      | No data available                                  |
| Auto-ignition temperature:                    | No data available                                  |
| Decomposition temperature:                    | No data available                                  |
| Viscosity:                                    | < 5 mPa·s at 20 °C                                 |
| Explosive properties:                         | No data available                                  |
| Oxidizing properties:                         | No data available                                  |

### 9.2. Other information

|                 |                   |
|-----------------|-------------------|
| Miscibility:    | No data available |
| Fat Solubility: | No data available |
| Conductivity:   | No data available |

## 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 product:

e) germ cell mutagenicity:

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

f) carcinogenicity:

Does not contain carcinogens (Ref. 1)

g) reproductive toxicity:

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

Toxicological information of the main substances found in the product:

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

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg

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

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.

Toxicological information of the product:

No data available

Toxicological information of the main substances found in the product:

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**

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  
No data available
- 14.7. Transport in bulk according to Annex II of Marpol 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)
  - Regulation (EU) n. 2015/1221 (ATP 7 CLP)
  - Regulation (EU) n. 2016/918 (ATP 8 CLP)
  - Regulation (EU) n. 2016/1179 (ATP 9 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 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 2: Hazards identification  
SECTION 3: Composition/information on ingredients  
SECTION 5: Firefighting measures  
SECTION 6: Accidental release measures  
SECTION 8: Exposure controls/personal protection  
SECTION 11: Toxicological information  
SECTION 12: Ecological information  
SECTION 14: Transport information  
SECTION 15: Regulatory information  
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

- 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.  
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.

## Safety Data Sheet

|           |                                                                                     |
|-----------|-------------------------------------------------------------------------------------|
| 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.                                                          |