

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1. Product identifier

Mixture identification: Trade name:

Singlepack Ink T9732

Trade code:

C13T973200

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: 24/1/2017 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:

EUH210 Safety data sheet available on request.

EUH208 Contains 2,4,7,9-tetramethyldec-5-yne-4,7-diol. May produce an allergic reaction.

- 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

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No data available

3.2. Mixtures

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

Qty	Name	Ident. Num	per	Classification
50% ~ 65%	Water	CAS: EC:	7732-18-5 231-791-2	The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
5% ~ 7%	Glycerol	CAS: EC:	56-81-5 200-289-5	The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
0.25% ~ 0.5%	2,4,7,9-tetramethyldec- 5-yne-4,7-diol	CAS: EC:	126-86-3 204-809-1	 3.3/1 Eye Dam. 1 H318 3.4.2/1B Skin Sens. 1B H317 4.1/C3 Aquatic Chronic 3 H412
0.1% ~ 0.25%	Triethanol amine	CAS: EC:	102-71-6 203-049-8	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.

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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.
 - Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contamined clothing should be changed before entering eating areas.

- 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
 - Glycerol CAS: 56-81-5
 - OEL Type: OSHA LTE: 5 mg/m3 Notes: PEL, as mist, respirable fraction
 - OEL Type: OSHA LTE: 15 mg/m3 Notes: PEL, as mist, total dust
 - DNEL Exposure Limit Values
 - No data available
 - **PNEC Exposure Limit Values**
 - 2,4,7,9-tetramethyldec-5-yne-4,7-diol CAS: 126-86-3
 - Target: Fresh Water Value: 0.04 mg/l
 - Target: Marine water Value: 0.004 mg/l
 - Target: Freshwater sediments Value: 0.32 mg/kg
 - Target: Marine water sediments Value: 0.032 mg/kg
- 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:

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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: Cyan Liquid Odour: Slightly Odour threshold: No data available pH: 8.3 ~ 9.3 at 20 °C Melting point / freezing point: -27.2 °C 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 Does not flash until 99.5 °C / 211 ° F Flash point: (closed cup method, ASTM D 3278) Evaporation rate: No data available Vapour pressure: No data available Relative density: 1.082 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

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11.1. Information on toxicological effects

Toxicological information of the mixture:

- e) germ cell mutagenicity:
 - Test: Mutagenesis Species: Salmonella Typhimurium and Escherichia coli Negative

Toxicological information of the main substances found in the mixture:

Glycerol - CAS: 56-81-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Guinea pig = 7750 mg/kg - Source: Journal of Industrial Hygiene and Toxicology. Vol. 23, Pg. 259, 1941

Test: LDLo - Route: Oral - Species: Human = 1428 mg/kg - Source: "Toxicology of Drugs and Chemicals," Deichmann, W.B., New York, Academic Press, Inc., 1969Vol. -, Pg. 288, 1969.

2,4,7,9-tetramethyldec-5-yne-4,7-diol - CAS: 126-86-3

a) acute toxicity:

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

b) skin corrosion/irritation:

Test: Skin Irritant - Species: Rabbit Mild irritant

c) serious eye damage/irritation:

Test: Eye Irritant - Species: Rabbit Highly irritating

d) respiratory or skin sensitisation: Test: Skin Sensitisation - Route: LLNA - Species: Mouse Sensitiser

e) germ cell mutagenicity:

Test: Mutagenesis - Species: Salmonella Typhimurium Negative

Triethanol amine - CAS: 102-71-6

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Guinea pig = 2200 mg/kg - Source: "Toxicometric Parameters of Industrial Toxic Chemicals Under Single Exposure," Izmerov, N.F., et al., Moscow, Centre of International Projects, GKNT, 1982Vol. -, Pg. 114, 1982.

Test: LD50 - Route: Oral - Species: Mouse = 5846 mg/kg - Source: Science Reports of the Research Institutes, Tohoku University, Series C: Medicine. Vol. 36(1-4), Pg. 10, 1989.

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. 2,4,7,9-tetramethyldec-5-yne-4,7-diol - CAS: 126-86-3

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 36 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia = 88 mg/l - Duration h: 48

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- Endpoint: EC50 Species: Algae = 15 mg/l Duration h: 72
- c) Bacteria toxicity:
 - Endpoint: EC50 Species: activated sludge = mg/l
- 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 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.

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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

Full text of phrases referred to in Section 3:

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

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:

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
CAS:	Dangerous Goods by Road. 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.