

Safety Data Sheet

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

1.1. Product identifier

Mixture identification:

Trade name: Ink Cartridge, White 2600ml, T7996

Trade code: C13T799600

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: 02/03/2017

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)

 Warning, Skin Irrit. 2, Causes skin irritation.

 Warning, Skin Sens. 1, May cause an allergic skin reaction.

 Warning, Repr. 2, Suspected of damaging fertility.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Warning

Hazard statements:

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H361f Suspected of damaging fertility.

Precautionary statements:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P308+P313 IF exposed or concerned: Get medical advice/attention.

Safety Data Sheet

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P405 Store locked up.
P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:
None

Contents

2-[2-(vinylloxy)ethoxy]ethyl acrylate
diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide
pentaerythritol tetraacrylate
phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide
pentaerythritol triacrylate
2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate
mequinol; 4-methoxyphenol; hydroquinone monomethyl ether
2,2'-(ethylenedioxy)diethyl diacrylate; triethylene glycol diacrylate

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
25% ~ 30%	2-[2-(vinylloxy)ethoxy]ethyl acrylate	CAS: 86273-46-3 EC: 451-690-9	3.4.2/1 Skin Sens. 1 H317
15% ~ 20%	Titanium dioxide	CAS: 13463-67-7 EC: 236-675-5	substance with a Community workplace exposure limit
3% ~ 5%	diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide	Index number: 015-203-00-X CAS: 75980-60-8 EC: 278-355-8	3.7/2 Repr. 2 H361f
3% ~ 5%	pentaerythritol tetraacrylate	Index number: 607-122-00-9 CAS: 4986-89-4 EC: 225-644-1	3.3/2 Eye Irrit. 2 H319 3.2/2 Skin Irrit. 2 H315 3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317
3% ~ 5%	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	Index number: 015-189-00-5 CAS: 162881-26-7 EC: 423-340-5	3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317 4.1/C4 Aquatic Chronic 4 H413
1% ~ 3%	2,2-bis(acryloyloxymethyl)butyl acrylate; trimethylolpropane triacrylate	Index number: 607-111-00-9 CAS: 15625-89-5 EC: 239-701-3	3.3/2 Eye Irrit. 2 H319 3.2/2 Skin Irrit. 2 H315 3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317
1% ~ 3%	pentaerythritol triacrylate	Index number: 607-110-00-3	3.3/2 Eye Irrit. 2 H319

Safety Data Sheet

		CAS: 3524-68-3 EC: 222-540-8	 3.2/2 Skin Irrit. 2 H315  3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317
0.25% ~ 0.5%	2,4-Diethyl-9H-thioxanthene-9-one	CAS: 82799-44-8	The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).
0.25% ~ 0.5%	mequinol; 4-methoxyphenol; hydroquinone monomethyl ether	Index number: 604-044-00-7 CAS: 150-76-5 EC: 205-769-8	 3.3/2 Eye Irrit. 2 H319  3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317  3.1/4/Oral Acute Tox. 4 H302
0.1% ~ 0.25%	2,2'-(ethylenedioxy)dihydroxy diacrylate; triethylene glycol diacrylate	Index number: 607-126-00-0 CAS: 1680-21-3 EC: 216-853-9	 3.3/2 Eye Irrit. 2 H319  3.2/2 Skin Irrit. 2 H315  3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317

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.

Safety Data Sheet

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.
 - Contaminated 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
 - Titanium dioxide - CAS: 13463-67-7
 - TLV TWA - 10 mg/m³
 - mequinol; 4-methoxyphenol; hydroquinone monomethyl ether - CAS: 150-76-5
 - OEL Type: ACGIH - LTE(8h): 5 mg/m³ - Notes: Eye irr, skin dam
 - 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:

Safety Data Sheet

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:	Specific
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:	> 121 °C / 250 ° F
Evaporation rate:	No data available
Vapour pressure:	No data available
Relative density:	No data available
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
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 mixture:

b) skin corrosion/irritation:

Test: Skin Irritant - Route: Dermal - Species: Rabbit Moderate irritant

e) germ cell mutagenicity:

Safety Data Sheet

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

f) carcinogenicity:

Components do not come under carcinogens (Ref. 1), except for Titanium dioxide

Toxicological information of the main substances found in the mixture:

2-[2-(vinylloxy)ethoxy]ethyl acrylate - CAS: 86273-46-3

d) respiratory or skin sensitisation:

Test: Skin Sensitisation - Route: LLNA - Species: Mouse Sensitiser

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 (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

Safety Data Sheet

- 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:
 - Restriction 3
 - 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

- Full text of phrases referred to in Section 3:
 - H317 May cause an allergic skin reaction.
 - H361f Suspected of damaging fertility.
 - H319 Causes serious eye irritation.
 - H315 Causes skin irritation.
 - H413 May cause long lasting harmful effects to aquatic life.
 - H302 Harmful if swallowed.

Hazard class and	Code	Description
------------------	------	-------------

Safety Data Sheet

hazard category		
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
Skin Sens. 1,1A,1B	3.4.2/1-1A-1B	Skin Sensitisation, Category 1,1A,1B
Repr. 2	3.7/2	Reproductive toxicity, Category 2
Aquatic Chronic 4	4.1/C4	Chronic (long term) aquatic hazard, category 4

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)
 - 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 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.

Safety Data Sheet

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.