

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

- 1.1. Product identifier
 - Mixture identification: Trade name:

Ink cartridge, T2981

- Trade code: C13T298140
- 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: 16/11/2015 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). Symbols:

None Hazard statements:

None

NON

Precautionary statements:

None

Special Provisions:

EUH210 Safety data sheet available on request.

Special provisions according to Annex XVII of REACH and subsequent amendments: None

- INONE r bozorda
- 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

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

Qty	Name	Ident. Numb		Classification
3% ~ 5%	- , ,	CAS: EC:	603-183-00-0 143-22-6 205-592-6 01-21194751 07-38	� 3.3/1 Eye Dam. 1 H318

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.

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.

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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.

- 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

- No occupational exposure limit available
 - DNEL Exposure Limit Values

N.Á.

PNEC Exposure Limit Values

2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutyl ether - CAS: 143-22-6

Target: Fresh Water - Value: 1.5 mg/l

Target: Freshwater sediments - Value: 5.77 mg/kg

Target: Marine water - Value: 0.15 mg/l

Target: Marine water sediments - Value: 0.13 mg/kg

Target: Microorganisms in sewage treatments - Value: 200 mg/l

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

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Appearance and colour: Odour: Odour threshold:	Black Liquid Slightly N.A.	
pH:	8.4 ~ 9.4	at 20°C
Melting point / freezing point:	N.A.	
Initial boiling point and boiling	range: N.A.	
Solid/gas flammability:	N.A.	
Upper/lower flammability or ex		N.A.
Vapour density:	N.A.	
Flash point:	N.A.	
Evaporation rate:	N.A.	
Vapour pressure:	N.A.	
Relative density:	N.A.	
Solubility in water:	Complete	
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	
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: N.A.

Toxicological information of the main substances found in the mixture:

2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutyl ether - CAS: 143-22-6

a) acute toxicity:

Test: LD50 - Route: Skin - Species: Rabbit = 3.54 ml/kg - Source: American Industrial Hygiene Association Journal. Vol. 23, Pg. 95, 1962.

Test: LD50 - Route: Oral - Species: Rat = 5300 mg/kg - Source: Office of Toxic Substances Report. Vol. OTS,

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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. N.A.

- 12.2. Persistence and degradability
 - N.A. 3 Bioacc
- 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

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)

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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. 453/2010 (Annex II) 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. 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

Full text of phrases referred to in Section 3:

H318 Causes serious eye damage.

This safety data sheet has been completely updated in compliance to Regulation 453/2010/EU. 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
	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: IATA-DGR:	International Air Transport Association. Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Áviation 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.



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

- 1.1. Product identifier
 - Mixture identification: Trade name:

Ink cartridge, T2982

Trade code: C13T298240 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: 16/11/2015 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). Symbols:

None Hazard statements:

None

Precautionary statements:

None

Special Provisions:

EUH210 Safety data sheet available on request.

Contents

- 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one: 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

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3.1. Substances

N.A.

3.2. Mixtures

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

Qty	Name	Ident. Numb	er	Classification
10% ~ 12.5%	2-[2-(2-butoxyethoxy)et hoxy]ethanol; TEGBE; triethylene glycol monobutyl ether	number: CAS: EC: REACH No.:	603-183-00-0 143-22-6 205-592-6 01-21194751 07-38	较 3.3/1 Eye Dam. 1 H318
< 0.05%	1,2-benzisothiazol-3(2 H)-one; 1,2-benzisothiazolin-3- one	number: CAS:	613-088-00-6 2634-33-5 220-120-9	 3.1/4/Oral Acute Tox. 4 H302 3.2/2 Skin Irrit. 2 H315 3.3/1 Eye Dam. 1 H318 3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317 4.1/A1 Aquatic Acute 1 H400

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 .

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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

No occupational exposure limit available

DNEL Exposure Limit Values

N.Á.

PNEC Exposure Limit Values

2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutyl ether -

CAS: 143-22-6

Target: Fresh Water - Value: 1.5 mg/l

Target: Freshwater sediments - Value: 5.77 mg/kg

Target: Marine water - Value: 0.15 mg/l

Target: Marine water sediments - Value: 0.13 mg/kg

Target: Microorganisms in sewage treatments - Value: 200 mg/l

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.

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Respiratory protection: Not needed for normal use. Thermal Hazards: None Environmental exposure controls: None Appropriate engineering controls: None

SECTION 9: Physical and chemical properties

0.4. Information on basis abusised on		
9.1. Information on basic physical and		es
Appearance and colour:	Cyan Liquid	
Odour:	Slightly	
Odour threshold:	N.A.	
pH:	8.7 ~ 9.7	at 20°C
Melting point / freezing point:	N.A.	
Initial boiling point and boiling r	ange: N.A.	
Solid/gas flammability:	N.A.	
Upper/lower flammability or ex	plosive limits:	N.A.
Vapour density:	N.A.	
Flash point:	>100 °C	
Evaporation rate:	N.A.	
Vapour pressure:	N.A.	
Relative density:	1.059	
Solubility in water:	Complete	
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	
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. ReactivityStable under normal conditions10.2. 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:

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N.A.

Toxicological information of the main substances found in the mixture:

2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutyl ether - CAS: 143-22-6

a) acute toxicity:

Test: LD50 - Route: Skin - Species: Rabbit = 3.54 ml/kg - Source: American Industrial Hygiene Association Journal. Vol. 23, Pg. 95, 1962.

Test: LD50 - Route: Oral - Species: Rat = 5300 mg/kg - Source: Office of Toxic Substances Report. Vol. OTS,

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. N.A.

- 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

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.

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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) n. 453/2010 (Annex II) 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. 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

Full text of phrases referred to in Section 3:

H318 Causes serious eye damage.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

This safety data sheet has been completely updated in compliance to Regulation 453/2010/EU. 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.

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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.



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

- 1.1. Product identifier
 - Mixture identification: Trade name:

Ink cartridge, T2983

- Trade code: C13T298340 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: 16/11/2015 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). Symbols:

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

SECTION 3: Composition/information on ingredients

- 3.1. Substances
- N.A.
- 3.2. Mixtures

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

Qty	Name	Ident. Numb	er	Classification
10% ~ 12.5%	2-[2-(2-butoxyethoxy)et hoxy]ethanol; TEGBE; triethylene glycol monobutyl ether	CAS: EC:	603-183-00-0 143-22-6 205-592-6 01-21194751 07-38	� 3.3/1 Eye Dam. 1 H318

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.

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.

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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

No occupational exposure limit available

DNEL Exposure Limit Values

N.Á.

PNEC Exposure Limit Values

2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutyl ether - CAS: 143-22-6

Target: Fresh Water - Value: 1.5 mg/l

Target: Freshwater sediments - Value: 5.77 mg/kg

Target: Marine water - Value: 0.15 mg/l

Target: Marine water sediments - Value: 0.13 mg/kg

Target: Microorganisms in sewage treatments - Value: 200 mg/l

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

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Appearance and Odour: Odour threshold pH: Melting point / fr	:	Magenta Liquid Slightly N.A. 8.0 ~ 9.0 N.A.	at 20°C
Initial boiling poi	nt and boiling ra	ange: N.A.	
Solid/gas flamm		N.A.	
Upper/lower flan	nmability or exp	N A	N.A.
Vapour density: Flash point:		N.A. >100 °C	
Evaporation rate	7.	N.A.	
Vapour pressure		N.A.	
Relative density		1.059	
Solubility in wate		Complete	
Solubility in oil:		N.A.	
Partition coefficie	· ·	vater): N.A.	
Auto-ignition ten	nperature:	N.A.	
Decomposition t	emperature:	N.A.	
Viscosity:		< 5 mPa⋅s	
Explosive prope	rties:	N.A.	
Oxidizing proper	ties:	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: N.A.

IN.A.

Toxicological information of the main substances found in the mixture:

2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutyl ether - CAS: 143-22-6

a) acute toxicity:

Test: LD50 - Route: Skin - Species: Rabbit = 3.54 ml/kg - Source: American Industrial Hygiene Association Journal. Vol. 23, Pg. 95, 1962.

Test: LD50 - Route: Oral - Species: Rat = 5300 mg/kg - Source: Office of Toxic Substances Report. Vol. OTS,

Test: LD50 - Route: Oral - Species: Guinea pig = 2200 mg/kg - Source: "Toxicometric Parameters of Industrial Toxic Chemicals Under Single Exposure,"

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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. - Notes: GASTROINTESTINAL: "HYPERMOTILITY, DIARRHEA" KIDNEY, URETER, AND BLADDER: OTHER CHANGES BEHAVIORAL: CONVULSIONS OR EFFECT ON SEIZURE THRESHOLD

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;
- i) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

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

- 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 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.

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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) n. 453/2010 (Annex II) 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. 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

Full text of phrases referred to in Section 3:

H318 Causes serious eye damage.

This safety data sheet has been completely updated in compliance to Regulation 453/2010/EU. 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 Dangerous Goods by Road.
- CAS: Chemical Abstracts Service (division of the American Chemical

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CLP: DNEL: EINECS: GefStoffVO: GHS:	Society). Classification, Labeling, Packaging. Derived No Effect Level. European Inventory of Existing Commercial Chemical Substances. Ordinance on Hazardous Substances, Germany. Globally Harmonized System of Classification and Labeling of
IATA:	Chemicals. 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
STE:	by Rail. 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.



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

- 1.1. Product identifier
 - Mixture identification: Trade name:

Ink cartridge, T2984

- Trade code: C13T298440
- 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: 16/11/2015 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). Symbols:

None Hazard statements:

None

Precautionary statements:

None

Special Provisions:

EUH210 Safety data sheet available on request.

Contents

- 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one: 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

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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
10% ~ 12.5%	2-[2-(2-butoxyethoxy)et hoxy]ethanol; TEGBE; triethylene glycol monobutyl ether	Index 603-183-00-0 number: CAS: 143-22-6 EC: 205-592-6 REACH No.: 01-21194751 07-38	• 3.3/1 Eye Dam. 1 H318
< 0.05%	1,2-benzisothiazol-3(2 H)-one; 1,2-benzisothiazolin-3- one	Index 613-088-00-6 number: CAS: 2634-33-5 EC: 220-120-9	 3.1/4/Oral Acute Tox. 4 H302 3.2/2 Skin Irrit. 2 H315 3.3/1 Eye Dam. 1 H318 3.4.2/1-1A-1B Skin Sens. 1,1A,1B H317 4.1/A1 Aquatic Acute 1 H400

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 .

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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

No occupational exposure limit available

DNEL Exposure Limit Values

N.Á.

PNEC Exposure Limit Values

2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutyl ether -

CAS: 143-22-6

Target: Fresh Water - Value: 1.5 mg/l

Target: Freshwater sediments - Value: 5.77 mg/kg

Target: Marine water - Value: 0.15 mg/l

Target: Marine water sediments - Value: 0.13 mg/kg

Target: Microorganisms in sewage treatments - Value: 200 mg/l

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.

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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 propertie	es
Appearance and colour:	Yellow Liquid	
Odour:	Slightly	
Odour threshold:	N.Ă.	
pH:	9.0 ~ 10.0	at 20°C
Melting point / freezing point:	N.A.	
Initial boiling point and boiling r	ange: N.A.	
Solid/gas flammability:	N.A.	
Upper/lower flammability or exp	plosive limits:	N.A.
Vapour density:	N.A.	
Flash point:	> 100 °C	
Evaporation rate:	N.A.	
Vapour pressure:	N.A.	
Relative density:	1.060	
Solubility in water:	Complete	
Solubility in oil:	N.A.	
Partition coefficient (n-octanol/		
Auto-ignition temperature:	N.A.	
Decomposition temperature:	N.A.	
Viscosity:	< 5 mPa⋅s	
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. ReactivityStable under normal conditions10.2. 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:

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N.A.

Toxicological information of the main substances found in the mixture:

Glycerols

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. - Notes: BEHAVIORAL: HEADACHE

GASTROINTESTINAL: NAUSEA OR VOMITING

2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutyl ether - CAS: 143-22-6

a) acute toxicity:

Test: LD50 - Route: Skin - Species: Rabbit = 3.54 ml/kg - Source: American Industrial Hygiene Association Journal. Vol. 23, Pg. 95, 1962.

Test: LD50 - Route: Oral - Species: Rat = 5300 mg/kg - Source: Office of Toxic Substances Report. Vol. OTS,

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. - Notes: GASTROINTESTINAL: "HYPERMOTILITY, DIARRHEA" KIDNEY, URETER, AND BLADDER: OTHER CHANGES BEHAVIORAL: CONVULSIONS OR EFFECT ON SEIZURE THRESHOLD

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. N.A.

- 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

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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
 - 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) n. 453/2010 (Annex II)

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.

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

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SECTION 16: Other information

Full text of phrases referred to in Section 3:

H318 Causes serious eye damage.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

This safety data sheet has been completely updated in compliance to Regulation 453/2010/EU. 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.

CAS: Dangerous Goods by Road. CAS: Chemical Abstracts Service (division of the American Chemical Society). CLP: Classification, Labeling, Packaging.	
CLP: Classification, Labeling, Packaging.	
DNEL Derived No Effect Level	
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 Áviation 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.	

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Material Safety Data Sheet

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

1.1. Product identifier: EPSON Ink Cartridge T2435

1.2. Relevant identified uses of the substance or mixture and uses advised against:

Identified uses; Ink for Inkjet Printing

1.3. Details of the supplier of the safety data sheet: Distributor: **EPSON EUROPE B.V.** Address: Azie building, Atlas ArenA, Hoogoorddreef 5,1101 BA Amsterdam Zuidoost The Netherlands www.epson-europe.com TEL: +31-20-314-5000 FAX: +31-20-314-5100 e-mail: chemicals@epson-europe.com Date Prepared: 15 May 2012 Revision: Α 1.4. Emergency telephone number: Giftnotruf Berlin +49 030 19240

SECTION 2: Hazards identification

2.1. Classification of the mixture:

Classification (1999/45/EC); Not Classified

2.2. Label elements: Label in Accordance with 1999/45/EC

Symbol(s); None Indication(s) of danger; None Risk phrase; None Safety advice; None

2.3. Other hazards:

Classification ((EC)No1907/2006); No data available

SECTION 3: Composition/information on ingredients

Substance / Mixture: Mixture (Ink Composition)

Ink Composition	CAS No.	EEC No.	EU registration No.	% By Weight	EU Symbols	EU R-phrase	EU OELs	Remark
Water	7732-18-5	231-791-2	Exemption	< 80	None	None	None	None
Proprietary organic materials	Trade secret	Trade secret	Not available for the moment	10 - 15	None	None	None	None
Glycerols	Trade secret	Trade secret	Not available for the moment	10 - 15	None	None	None	None
TEGBE	143-22-6	205-592-6	Not available for the moment	5 - 10	X _i	R-41	None	None
Colorants	Trade secret	Trade secret	Not available for the moment	1 – 5	None	None	None	None
Triethanol amine	102-71-6	203-049-8	Not available for the moment	< 1	None	None	None	None

Please refer to the section 16, where the full text of each relevant R-phrase.



SECTION 4: First aid measures

4.1. Description of first aid measures

- **4.1.1.** *Eyes* : Immediately flush with room temperature, low pressure and clean water for at least 15 minutes. Seek medical attention if eye irritation continues.
- *4.1.2. Skin :* Wash surface areas with soap and water. Wash soiled clothing before wearing again. Consult a physician if irritation continues.
- **4.1.3.** *Inhalation* : Remove subject to ventilated fresh air. If not breathing, give artificial respiration right away. If breathing is difficult, give oxygen. Seek immediate medical attention.
- 4.1.4. Ingestion : Seek medical advice; and attention if stomach continues to be upset.

4.2. Most important symptoms and effects, both acute and delayed:

Skin:Ink contact with skin may cause irritation, swelling or redness.

4.3. Indication of any immediate medical attention and special treatment needed: Not necessary

SECTION 5: Fire-fighting measures

- 5.1. Extinguishing Media
 - 5.1.1.Suitable extinguishing media: Dry chemical, carbon dioxide or water.
 - 5.1.2. Unsuitable extinguishing media: None
- 5.2. Special hazards arising from the substance or mixture: None

5.3. Advice for firefighters: No special fire fighting procedures are required other than breathing apparatus. No special explosion hazards are known.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel: Eye or Skin protection required during clean-up. Use proper ventilation.6.1.2. For emergency responders: None

6.2. Environmental precautions: Do not release to sewer, surface- or ground-water.

6.3. Methods and material for containment and cleaning up

- 6.3.1. Advice on how to contain a spill: Use sponges to wipe-up ink.
- *6.3.2. Advice how to clean-up a spill:* Rinse area with damp cloth.Place waste in closed container for disposal. Wash hands with soap and water.
- 6.3.3. Any other information: Do not dispose of waste to the sewer.
- 6.4. Reference to other sections: None

SECTION 7: Handling and storage

7.1. Precautions for safe handling

7.1.1. Recommendations: Keep out of reach of children and do not drink ink. Do not dismantle cartridge.

7.1.2. Advice on general occupational hygiene:

Avoid contact with eyes or clothing. In the case of skin contact, wash with soap and water.

7.2. Conditions for safe storage, including any incompatibilities:

Do not store the cartridge in high or freezing temperatures. Keep cartridge out of direct sunlight. Do not store cartridges with oxidizing agents or explosives. Make sure cartridge is dry before insertion into printer housing.

7.3. Specific end use(s): Not specified



SECTION 8: Exposure controls/personal protection

8.1. Control parameters: Not established

8.2. Exposure Controls

8.2.1. Appropriate engineering controls: Proper ventilation, in prevention

8.2.2. Individual protection measures, such as personal protective equipment

8.2.2.1. Use of personal protective equipment:

Not required under suitable use as setting the cartridge on the printer. 8.2.2.2. Detailed specification on equipment to provide adequate and suitable protection

- (a) eye/face protection: Not required under suitable use as setting the cartridge on the printer.
- (b) skin protection: hand protection & others:

Not required under suitable use as setting the cartridge on the printer.

- (c) respiratory protection: Not required under suitable use as setting the cartridge on the printer.
- (*d*) thermal hazards: Not required under suitable use as setting the cartridge on the printer.

8.2.3. Environmental exposure controls: Not established

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and che	mical properties:
Appearance:	Light Cyan Liquid
Odour:	Slightly
Odour threshold:	No data available
pH:	8.6± 0.5 at 20°C
Melting point / freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flash point:	Not detected until 100°C (Closed cup, ASTM D3278)
Evaporation rate:	No data available
Flammability (solid, gas):	Not applicable (liquid)
Upper/lower flammability or explosive lin	mits:No data available
Vapor pressure:	No data available
Vapor density:	No data available
Relative density:	About 1.06 at 20°C
Solubility(ies):	Complete
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	Less than 5 mPa·s at 20°C
Explosive properties:	None
Oxidizing properties:	None
9.2. Other information:	None

SECTION 10:Stability and reactivity

10.1. Reactivity:	Stable under normal temperature
10.2. Chemical stability:	Stable under normal temperature
10.3. Possibility of hazardous reactions:	None
10.4. Conditions to avoid:	High and freezing temperatures
10.5. Incompatible materials:	Oxidizers and explosives
10.6. Hazardous decomposition products:	No data available



SECTION 11: Toxicological information

11.1. Information on toxicological effects:

Acute toxici	ty:	
	Oral LD ₅₀ :	Not meet the criteria for classification according to EU Directive 1999/45/EC
	Dermal LD ₅₀ :	Not meet the criteria for classification according to EU Directive 1999/45/EC
	Inhalant LC ₅₀	: Not applicable
Irritation	Eye:	Not meet the criteria for classification according to EU Directive 1999/45/EC
	Skin:	Not meet the criteria for classification according to EU Directive 1999/45/EC
Corrosivity:		Not meet the criteria for classification according to EU Directive 1999/45/EC
Sensitisatio	n Skin:	Not meet the criteria for classification according to EU Directive 1999/45/EC
	Inhalation	Not meet the criteria for classification according to EU Directive 1999/45/EC
Carcinogen	icity:	Not contain any substances listed in IARC Monographs (1,2A and 2B)
Mutagenicity:		Not meet the criteria for classification according to EU Directive 1999/45/EC
Toxicity for	reproduction:	Not meet the criteria for classification according to EU Directive 1999/45/EC

SECTION 12:Ecological information

12.1. Toxicity:	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: Has not carried out PBT and vPvB assessment		
12.6. Other adverse effects:	No data available	

SECTION 13: Disposal considerations

13.1Waste treatment methods: Disposal should be in accordance with federal, state, and local requirements.

SECTION 14: Transport information

14.1. UN number: Not applicable

- 14.2. UN proper shipping name: Not applicable
- 14.3. Transport hazard class(es): Not applicable
- 14.4. Packing group: Not applicable

14.5. Environmental hazards: Not applicable

14.6. Special precautions for user: Not applicable

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable



SECTION 15:Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:

EU Information:		
Regulation (EC) No 2037/2000:	Is not subject	
Regulation (EC) No 850/2004:		Is not subject
Regulation (EC) No 689/2008:		Is not subject
US Information:		
TSCA Section 4(a) Final Test Rules Regul	lated:	Not regulated
TSCA Section 8(a) Preliminary Assessment Information Rule (PAIR):		Not regulated
TSCA Section 12(b) One-Time Export Notification Regulated:		Not regulated
California Proposition 65:		Not regulated
Canada Information:		
WHMIS Controlled Product:	Not applicable (Manufacture	ed article)
Australia Information:		
Statement of Hazardous Nature: Not classified as hazardous according to criteria of NOHS		according to criteria of NOHSC
15.2. Chemical safety assessment: This ink has	s not carried out any Chemical	Safety Assessment yet.

SECTION 16:Other information

List of relevant R-phrases: R-41 Risk of serious damage to eyes.

This "Material Safety Data Sheet" contains health, safety, and environmental information. It does not replace any precautionary language or use and disposal information which accompanies the product. The information contained herein is believed to be accurate at the time of preparation, but should only be used as a guide. It is subject to revision from time to time. EPSON does not warrant the completeness or accuracy of the information contained herein.



Material Safety Data Sheet

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

1.1. Product identifier: EPSON Ink Cartridge T2436

1.2. Relevant identified uses of the substance or mixture and uses advised against:

Identified uses; Ink for Inkjet Printing

1.3. Details of the supplier of the safety data sheet: Distributor: **EPSON EUROPE B.V.** Address: Azie building, Atlas ArenA, Hoogoorddreef 5,1101 BA Amsterdam Zuidoost The Netherlands www.epson-europe.com TEL: +31-20-314-5000 FAX: +31-20-314-5100 e-mail: chemicals@epson-europe.com Date Prepared: 15 May 2012 Revision: Α 1.4. Emergency telephone number: Giftnotruf Berlin +49 030 19240

SECTION 2: Hazards identification

2.1. Classification of the mixture:

Classification (1999/45/EC); Not Classified

2.2. Label elements: Label in Accordance with 1999/45/EC

Symbol(s); None Indication(s) of danger; None Risk phrase; None Safety advice; None

2.3. Other hazards:

Classification ((EC)No1907/2006); No data available

SECTION 3: Composition/information on ingredients

Substance / Mixture: Mixture (Ink Composition)

Ink Composition	CAS No.	EEC No.	EU registration No.	% By Weight	EU Symbols	EU R-phrase	EU OELs	Remark
Water	7732-18-5	231-791-2	Exemption	< 80	None	None	None	None
Glycerols	Trade secret	Trade secret	Not available for the moment	10 - 15	None	None	None	None
Proprietary organic materials	Trade secret	Trade secret	Not available for the moment	10 - 15	None	None	None	None
TEGBE	143-22-6	205-592-6	Not available for the moment	5 - 10	X _i	R-41	None	None
Colorants	Trade secret	Trade secret	Not available for the moment	1 – 5	None	None	None	None
Triethanol amine	102-71-6	203-049-8	Not available for the moment	< 1	None	None	None	None

Please refer to the section 16, where the full text of each relevant R-phrase.



SECTION 4: First aid measures

4.1. Description of first aid measures

- **4.1.1.** *Eyes* : Immediately flush with room temperature, low pressure and clean water for at least 15 minutes. Seek medical attention if eye irritation continues.
- *4.1.2. Skin :* Wash surface areas with soap and water. Wash soiled clothing before wearing again. Consult a physician if irritation continues.
- **4.1.3.** *Inhalation :* Remove subject to ventilated fresh air. If not breathing, give artificial respiration right away. If breathing is difficult, give oxygen. Seek immediate medical attention.
- 4.1.4. Ingestion : Seek medical advice; and attention if stomach continues to be upset.

4.2. Most important symptoms and effects, both acute and delayed:

- Skin:Ink contact with skin may cause irritation, swelling or redness.
- 4.3. Indication of any immediate medical attention and special treatment needed: Not necessary

SECTION 5: Fire-fighting measures

- 5.1. Extinguishing Media
 - 5.1.1.Suitable extinguishing media: Dry chemical, carbon dioxide or water.
 - 5.1.2. Unsuitable extinguishing media: None
- 5.2. Special hazards arising from the substance or mixture: None
- **5.3.** *Advice for firefighters:* No special fire fighting procedures are required other than breathing apparatus. No special explosion hazards are known.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- 6.1.1. For non-emergency personnel: Eye or Skin protection required during clean-up. Use proper ventilation.6.1.2. For emergency responders: None
- 6.2. Environmental precautions: Do not release to sewer, surface- or ground-water.
- 6.3. Methods and material for containment and cleaning up
 - 6.3.1. Advice on how to contain a spill: Use sponges to wipe-up ink.
 - *6.3.2. Advice how to clean-up a spill:* Rinse area with damp cloth.Place waste in closed container for disposal. Wash hands with soap and water.
- 6.3.3. Any other information: Do not dispose of waste to the sewer.
- 6.4. Reference to other sections: None

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- 7.1.1. Recommendations: Keep out of reach of children and do not drink ink. Do not dismantle cartridge.
- 7.1.2. Advice on general occupational hygiene:

Avoid contact with eyes or clothing. In the case of skin contact, wash with soap and water.

7.2. Conditions for safe storage, including any incompatibilities:

Do not store the cartridge in high or freezing temperatures. Keep cartridge out of direct sunlight. Do not store cartridges with oxidizing agents or explosives. Make sure cartridge is dry before insertion into printer housing.

7.3. Specific end use(s): Not specified



SECTION 8: Exposure controls/personal protection

8.1. Control parameters: Not established

8.2. Exposure Controls

8.2.1. Appropriate engineering controls: Proper ventilation, in prevention

8.2.2. Individual protection measures, such as personal protective equipment

8.2.2.1. Use of personal protective equipment:

Not required under suitable use as setting the cartridge on the printer. 8.2.2.2. Detailed specification on equipment to provide adequate and suitable protection

(a) eye/face protection: Not required under suitable use as setting the cartridge on the printer.
(b) skin protection: hand protection & others:

(c) respiratory protection:
(d) thermal hazards:
Not required under suitable use as setting the cartridge on the printer. Not required under suitable use as setting the cartridge on the printer.

8.2.3. Environmental exposure controls: Not established

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties:

7.1. Information on basic physical and the	mean propernes.
Appearance:	Light Magenta Liquid
Odour:	Slightly
Odour threshold:	No data available
pH:	8.4± 0.5 at 20°C
Melting point / freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flash point:	Not detected until 100°C (Closed cup, ASTM D3278)
Evaporation rate:	No data available
Flammability (solid, gas):	Not applicable (liquid)
Upper/lower flammability or explosive li	mits:No data available
Vapor pressure:	No data available
Vapor density:	No data available
Relative density:	About 1.06 at 20°C
Solubility(ies):	Complete
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	Less than 5 mPa·s at 20°C
Explosive properties:	None
Oxidizing properties:	None
9.2. Other information:	None

SECTION 10:Stability and reactivity

10.1. Reactivity:	Stable under normal temperature
10.2. Chemical stability:	Stable under normal temperature
10.3. Possibility of hazardous reactions:	None
10.4. Conditions to avoid:	High and freezing temperatures
10.5. Incompatible materials:	Oxidizers and explosives
10.6. Hazardous decomposition products:	No data available



SECTION 11: Toxicological information

11.1. Information on toxicological effects:

Acute toxicity.	•	
C	Dral LD ₅₀ :	Not meet the criteria for classification according to EU Directive 1999/45/EC
Γ	Dermal LD ₅₀ :	Not meet the criteria for classification according to EU Directive 1999/45/EC
Iı	nhalant LC ₅₀ :	Not applicable
Irritation	Eye:	Not meet the criteria for classification according to EU Directive 1999/45/EC
	Skin:	Not meet the criteria for classification according to EU Directive 1999/45/EC
Corrosivity:		Not meet the criteria for classification according to EU Directive 1999/45/EC
Sensitisation	Skin:	Not meet the criteria for classification according to EU Directive 1999/45/EC
	Inhalation:	Not meet the criteria for classification according to EU Directive 1999/45/EC
Carcinogenici	ty:	Not contain any substances listed in IARC Monographs (1,2A and 2B)
Mutagenicity:		Not meet the criteria for classification according to EU Directive 1999/45/EC
Toxicity for re	production:	Not meet the criteria for classification according to EU Directive 1999/45/EC

SECTION 12:Ecological information

12.1. Toxicity:	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: Has not carried out PBT and vPvB assessment		
12.6. Other adverse effects:	No data available	

SECTION 13: Disposal considerations

13.1Waste treatment methods: Disposal should be in accordance with federal, state, and local requirements.

SECTION 14: Transport information

14.1. UN number:	Not applicable
14.2. UN proper shipping name:	Not applicable
14.3. Transport hazard class(es):	Not applicable
14.4. Packing group:	Not applicable
14.5. Environmental hazards:	Not applicable
14.6. Special precautions for user:	Not applicable
14.7. Transport in bulk according to	Annex II of MARPOL 73/78 and the IBC Code: Not applicable



SECTION 15:Regulatory information

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Regulation (EC) No 850/2004:		Is not subject	
Regulation (EC) No 689/2008:		Is not subject	
US Information:			
TSCA Section 4(a) Final Test Rules Regulated:		Not regulated	
TSCA Section 8(a) Preliminary Assessment Information Rule (PAIR):		Not regulated	
TSCA Section 12(b) One-Time Export Notification Regulated:		Not regulated	
California Proposition 65:		Not regulated	
Canada Information:			
WHMIS Controlled Product:	Not applicable (Manufactured article)		
Australia Information:			
Statement of Hazardous Nature: Not classified as hazardous according to criteria of NOF		according to criteria of NOHSC	
15.2. Chemical safety assessment: This ink has not carried out any Chemical Safety Assessment yet.			

SECTION 16:Other information

List of relevant R-phrases: R-41 Risk of serious damage to eyes.

This "Material Safety Data Sheet" contains health, safety, and environmental information. It does not replace any precautionary language or use and disposal information which accompanies the product. The information contained herein is believed to be accurate at the time of preparation, but should only be used as a guide. It is subject to revision from time to time. EPSON does not warrant the completeness or accuracy of the information contained herein.