

	uct identifier				
	ture identification	on:	Ink Cartridge, Matte Blacl	κ.	T3248
		<b>6</b> . 1	-		
	vant identified u commended us		ubstance or mixture and us	es ac	dvised against
110		Ink for inkje	et printing		
	ils of the supplie mpany:	er of the safe	ety data sheet		
			JROPE B.V.		
		Zuidoost T	ng, Atlas ArenA, Hoogoordc he Netherlands		
		Phone num		0-314	4-5000
Co	mpetent person		e for the safety data sheet:		
Da	to:	chemicals	@epson-europe.com 30/06/2016		
	vision:		1.0		
	gency telephor	e number			
	one number:		+31-20-314-5000		
Gif	tnotruf Berlin;		+48 (0) 30 30686 790		
Ad 2.2. Labe The Ha Ha	(CLP). verse physicoch No other ha I elements	is not class nemical, hur zards classified a s: s:	ified as dangerous accordir nan health and environmen s dangerous according to R	tal ef	ifects:
Sp	ecial Provisions	:			
-			eet available on request.		
Sp	ecial provisions None	according t	o Annex XVII of REACH an	d sub	osequent amendments:
2.3. Othe					
		None - PBT	F Substances: None		
Oth	ner Hazards:				
	No other ha	zards			
SECTION 3: C 3.1. Subs No	tances	nformatio	n on ingredients		
3.2. Mixtu					
		nents within	the meaning of the CLP re	gulat	ion and related classification:
Ha			0	-	
Ha Qty	Name		dent. Number		ssification



65% ~	Water	CAS:	7732-18-5	The product is not classified as
80%		EC:	231-791-2	dangerous according to
				Regulation EC 1272/2008 (CLP).
10% ~	Glycerol	CAS:	56-81-5	The product is not classified as
12.5%	-	EC:	200-289-5	dangerous according to
				Regulation EC 1272/2008 (CLP).
1% ~ 3%	1,1',1"-nitrilotripropan-2	Index	603-097-00-3	3.3/2 Eye Irrit. 2 H319
	-ol;	number:		✓ 3.3/2 Lye Intt. 211319
	triisopropanolamine	CAS:	122-20-3	
		EC:	204-528-4	
1% ~ 3%	2-[2-(2-butoxyethoxy)et	Index	603-183-00-0	较 3.3/1 Eye Dam. 1 H318
	hoxy]ethanol;	number:		• 5.5/T Eye Dam. TTISTO
	TEGBE; triethylene	CAS:	143-22-6	
	glycol monobutyl ether	EC:	205-592-6	
		REACH No.:	01-21194751	
			07-38	

### **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**

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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
  - 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-[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 Appearance and colour: Odour: Odour threshold: pH: Melting point / freezing point: Initial boiling point and boiling range: Solid/gas flammability: Upper/lower flammability or explosive limits: Vapour density: Flash point: Evaporation rate: Vapour pressure: Relative density: Solubility in water: Solubility in oil: Partition coefficient (n-octanol/water): Auto-ignition temperature: Decomposition temperature: Viscosity: Explosive properties: Oxidizing properties: 9.2. Other information

Miscibility: Fat Solubility: Conductivity:

### **SECTION 10: Stability and reactivity**

- 10.1. Reactivity
  - Stable under normal conditions
- 10.2. Chemical stabilityStable under normal conditions10.3. 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:
    - ) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2500 mg/kg Test: LD50 - Route: Dermal - Species: Rat > 2000 mg/kg

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Black Liquid Slightly No data available 8.5 ~ 9.9 at 20 °C -12.1 °C No data available No data available No data available No data available > 120 °C / 248 ° F No data available No data available 1.074 at 20 °C Complete No data available No data available No data available No data available < 5 mPa·s at 20 °C No data available No data available

No data available No data available No data available



b) skin corrosion/irritation:

Test: Skin Irritant - Species: Rabbit Mild irritant

c) serious eye damage/irritation:

Test: Eye Irritant - Species: Rabbit Minimal irritant

d) respiratory or skin sensitisation:

Test: Skin Sensitisation - Route: Maximisation Assay - Species: Guinea pig Non-sensitiser

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. - 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: Dermal - 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 (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

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### **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. 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**

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#### Full text of phrases referred to in Section 3: H319 Causes serious eye irritation. H318 Causes serious eye damage.

Hazard class and hazard category	Code	Description
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2

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.



WGK:

(ACGIH Standard). German Water Hazard Class.