

GHS Product identifier		
Mixture identifica		
Trade name:	Ink Cartrid	ge, T8098
Recommended use of	the chemical and restrictio	ns on use
Recommended u		
	Ink for inkjet printing	
Supplier's details		
Supplier in Austr		
	EPSON Australia Pty L	
		Ryde, NSW 2113, Australia
	(02) 8899 3666	www.epson.com.au
Supplier in New		
	EPSON New Zealand F	
		uckland 1010, New Zealand
Data	(09) 366 6855	www.epson.co.nz
Date:	02/03/2018	3
Revision:	1.0	
Emergency phone num		
Australia New Zealand		3666 (Mon-Fri, 9AM-5PM, AEST) 855 (Mon-Fri, 9AM-5PM, NZST)
new Zealanu	(09) 500 0	555 (MOH-FII, SAM-5FM, NZST)
lazard identification		
Classification of the Ha		
		according to GHS - Fifth revised edition.
	cluding precautionary stat	
	sified as dangerous accore	ding to GHS - Fifth revised edition.
Hazard pictograms:		
None		
Hazard statements:		
None		
Precautionary stateme	nts:	
None		
Special Provisions:		
None Other hazards which de		

Substances No Mixtures

Qty	Name	Ident. Numb	er	Classification
65% ~	Water	CAS:	7732-18-5	The product is not classified as
80%		EC:	231-791-2	dangerous according to GHS - Fifth revised edition.
7% ~	Glycerol	CAS:	56-81-5	The product is not classified as
10%		EC:	200-289-5	dangerous according to GHS -
				Fifth revised edition.
5% ~ 7%	Carbon black	CAS:	1333-86-4	The product is not classified as
		EC:	215-609-9	dangerous according to GHS -
				Fifth revised edition.
1% ~ 3%	1,1',1"-nitrilotripropan-2	Index	603-097-00-3	3.3/2A Eye Irrit. 2A H319
	-ol;	number:		



triisopropanolamine	CAS:	122-20-3	
	EC:	204-528-4	

### 4. First-aid measures

Description of necessary 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.

Symptoms caused by exposure

None

Medical attention and special treatment

Treatment:

None

### 5. Fire-fighting measures

Suitable extinguishing media Water. Carbon dioxide (CO2). Unsuitable extinguishing media: None in particular. Specific hazards arising from the chemical Do not inhale explosion and combustion gases. Burning produces heavy smoke. Hazardous combustion products: None Explosive properties: No data available Oxidizing properties: No data available Special protective equipment and precautions for fire-fighters 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.

### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

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

Methods and material for containment and cleaning up

Wash with plenty of water.

## 7. Handling and storage

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

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Do not eat or drink while working. See also section 8 for recommended protective equipment. 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.

#### 8. Exposure controls/personal protection

Control parameters - exposure standards, biological monitoring Glycerol - CAS: 56-81-5 - OEL Type: OSHA - TWA: 5 mg/m3 - OEL Type: OSHA - TWA: 15 mg/m3 Carbon black - CAS: 1333-86-4 - OEL Type: ACGIH - TWA(8h): 3 mg/m3 - OEL Type: OSHA - TWA: 3.5 mg/m3 **DNEL Exposure Limit Values** No data available **PNEC Exposure Limit Values** No data available Appropriate engineering controls None Individual protection measures, such as personal protective equipment (PPE) 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

**Chemical Controls for Australian Printers** 

- Minimise skin contact with inks and cleaning chemicals.
- Ensure that ventilation equipment is maintained and working effectively, to minimise airborne exposures.

## 9. Physical and chemical properties

	Appearance and colour:	Black Liquid	
	Odour:	Slightly	
	Odour threshold:	No data available	
	pH:	9.2 ~ 10.2 at 20 ℃	
	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:	Does not flash until 100 °C / 212 °F	(closed cup
		method, ASTM D 3278)	
	Evaporation rate:	No data available	
	Vapour pressure:	No data available	
	Relative density:	No data available	
	Solubility in water:	Soluble	
	Solubility in oil:	No data available	
	Partition coefficient (n-octanol/water):	No data available	
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No data available No data available < 5 mPa·s at 20 °C No data available No data available No data available No data available

### 10. Stability and reactivity

Reactivity Stable under normal conditions Chemical stability Stable under normal conditions Possibility of hazardous reactions None Conditions to avoid Stable under normal conditions. Incompatible materials None in particular. Hazardous decomposition products None.

### **11. Toxicological information**

Toxicological information of the product:

e) germ cell mutagenicity:

Test: Mutagenesis - Species: Salmonella Typhimurium and Escherichia coli Negative f) carcinogenicity:

Components do not come under carcinogens (Ref. 1), except for Carbon black g) reproductive toxicity:

Does not contain reproductive toxicity and developmental toxic substances (Ref. 2) Toxicological information of the main substances found in the product:

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.

Carbon black - CAS: 1333-86-4

a) acute toxicity:

Test: LD50 - Route: Dermal - Species: Rabbit > 3 g/kg - Source: Acute Toxicity Data. Journal of the American College of Toxicology, Part B. Vol. 15

Test: LD50 - Route: Oral - Species: Rat > 15400 mg/kg - Source: Acute Toxicity Data. Journal of the American College of Toxicology, Part B. Vol. 15

Carbon black - CAS: 1333-86-4

With excessive exposure, carbon black has been listed as a possible human carcinogen. However, as engineered within this ink cartridge, emissions to air of carbon black during normal printing use have not been found. IARC, the International Agency for Research on Cancer, has found printing inks to be not classifiable as human carcinogens.

If not differently specified, the information 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;

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e) germ cell mutagenicity;

f) carcinogenicity;

g) reproductive toxicity;

h) STOT-single exposure;

i) STOT-repeated exposure;

j) aspiration hazard.

### 12. Ecological information

Ecotoxicity

Adopt good working practices, so that the product is not released into the environment. No data available Persistence and degradability No data available Bioaccumulative potential No data available Mobility in soil No data available Other adverse effects None

# 13. Disposal considerations

#### **Disposal methods**

Recover if possible. In so doing, comply with the local and national regulations currently in force.

#### **14. Transport information**

UN number

Not classified as dangerous in the meaning of transport regulations. UN proper shipping name No data available

Transport hazard class(es) No data available

Packing group, if applicable

No data available

Environmental hazards

No

Special precautions for user No data available

Additional Information No data available

## **15. Regulatory information**

Safety, health and environmental regulations specific for the product in question
 This Safety Data Sheet has been prepared according to the Australian Work Health and
 Safety (WHS) act and the Code of Practice on preparation of safety data sheets for
 Hazardous Chemicals
 Australia Information:
 Statement of Hazardous Nature:
 Not classified as hazardous according to criteria of NOHSC
 New Zealand Information:
 Hazardous Substances and New Organisms Act 1996:
 Not regulated

#### **16. Other information**

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

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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

Insert further consulted bibliography

Ref. 1 ·IARC Monographs on the Evaluation Carcinogenic Risks to Humans (IARC: International Agency for Research on Cancer)
·Journal of Occupational Health (JOH) (Japan Society of Occupational Health (JSOH))
·TLVs and BEIs (ACGIH: American Conference of Governmental Industrial Hygienists)
·IRIS Carcinogenic Assessment (IRIS: Integrated Risk Information System of US EPA)
·National Toxicology Program (NTP) Report on Carcinogens (USA)
·Annex VI of REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
·MAK und BAT Werte Liste (DFG: German Research Foundation)
·TRGS 905, Verzeichnis krebserzeugender, keimzell mutagener oder reproduktionstoxischer Stoffe (AGS: Committee on Hazardous Substances, Germany)

 Ref. 2 •Annex VI of REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
 •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.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods

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	by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.
SUSMP:	SUSMP: Standard for the Uniform Scheduling of Medicines and
	Poisons