Safety Data Sheet

1. Identification

GHS Product identifier

Mixture identification:

Trade name: INK CARTRIDGE,ST,Y,3L

Trade code: T43B4

Recommended use of the chemical and restrictions on use

Recommended use:

Ink for inkjet printing

Supplier's details

Supplier in Australia:

EPSON Australia Pty Limited
Level1, 3 Talavera Road Macquarie Park NSW 2113, Australia
(02) 8899 3666 www.epson.com.au

Supplier in New Zealand:

EPSON New Zealand Pty Limited
7-9 Fanshawe Street, Auckland 1010, New Zealand
(09) 366 6855 www.epson.co.nz

Date: 15/12/2022

Revision: 5.0

Emergency phone number

Australia (02) 8899 3666 (Mon-Fri, 9AM-5PM, AEST)

New Zealand (09) 366 6855 (Mon-Fri, 9AM-5PM, NZST)

2. Hazard identification

Classification of the Hazardous chemical

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

GHS label elements, including precautionary statements

Hazard pictograms:

Warning

Hazard statements:

H317 May cause an allergic skin reaction.

Precautionary statements:

P261 Avoid breathing dust/mist/spray.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Other hazards which do not result in a classification

No other hazards

3. Composition/information on ingredients

Substances

No

Mixtures

Hazardous components within the meaning of GHS and related classification:

Qty	Name	Ident. Number	Classification
50% ~ 65%	Water	CAS: 7732-18-5 EC: 231-791-2	The product is not classified as dangerous according to GHS - Seventh revised edition.
20% ~ 25%	Glycerol	CAS: 56-81-5 EC: 200-289-5	The product is not classified as dangerous according to GHS - Seventh revised edition.
1% ~ 3%	C.I. Disperse Yellow 54	CAS: 17772-51-9 EC: 241-753-7	3.4.2/1 Skin Sens. 1 H317
0.25% ~ 0.5%	Triethanolamine	CAS: 102-71-6 EC: 203-049-8 REACH No.: 01-2119486482-31	The product is not classified as dangerous according to GHS - Seventh revised edition.

4. First-aid measures

Description of necessary first-aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Remove contaminated clothing immediately and dispose off safely.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

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.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
See also section 8 for recommended protective equipment.
Advice on general occupational hygiene:
Contamined clothing should be changed before entering eating areas.
Do not eat or drink while working.

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 - Notes: Respirable dust
- OEL Type: OSHA - TWA: 15 mg/m3 - Notes: Total dust

Triethanolamine - CAS: 102-71-6

- OEL Type: ACGIH - TWA(8h): 5 mg/m3

DNEL Exposure Limit Values

Triethanolamine - CAS: 102-71-6

Worker Industry: 6.3 mg/kg/day - Consumer: 3.1 mg/kg/day - Exposure: Human Dermal - Frequency: Long Term, systemic effects
Worker Industry: 5 mg/m3 - Consumer: 1.25 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Consumer: 13 mg/kg/day - Exposure: Human Oral - Frequency: Short Term, systemic effects

PNEC Exposure Limit Values

Triethanolamine - CAS: 102-71-6

Target: Fresh Water - Value: 0.32 mg/l
Target: Marine water - Value: 0.032 mg/l
Target: Freshwater sediments - Value: 1.7 mg/kg
Target: Marine water sediments - Value: 0.17 mg/kg
Target: Soil (agricultural) - Value: 0.151 mg/kg

Appropriate engineering controls

None

Individual protection measures, such as personal protective equipment (PPE)

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Use personal protective equipment as required.

Thermal Hazards:

None

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state:	Liquid	
Colour:	Yellow	
Odour:	Slightly	
Melting point / freezing point:	No data available	
Boiling point or initial boiling point and boiling range:	No data available	
Flammability:	Non-flammable	
Lower and upper explosion limit:	No data available	
Flash point:	> 95 °C / 203 ° F	
Auto-ignition temperature:	No data available	
Decomposition temperature:	No data available	
pH:	7.5 ~ 8.7	at 20 °C
Kinematic viscosity:	No data available	
Solubility in water:	Complete	
Vapour pressure:	No data available	
Relative vapour density:	No data available	
Particle characteristics:	Not Relevant	

Other information

Viscosity:	< 5 mPa·s	
Viscosity:	< 5 mPa·s	at 20 °C

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.

Acrolein (CAS #107-02-8);

When glycerols is heated over 300°C, it will decompose into acrolein.

11. Toxicological information

Toxicological information of the product:

f) carcinogenicity:

Does not contain carcinogens (Ref. 1)

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.
Triethanolamine - CAS: 102-71-6
a) acute toxicity:
Test: LD50 - Route: Oral - Species: Guinea pig = 2200 mg/kg - Source: "Toxicometric Parameters of Industrial Toxic Chemicals Under Single Exposure," Izmerov, N.F., et al., Moscow, Centre of International Projects, GKNT, 1982Vol. -, Pg. 114, 1982.
Test: LD50 - Route: Oral - Species: Mouse = 5846 mg/kg - Source: Science Reports of the Research Institutes, Tohoku University, Series C: Medicine. Vol. 36(1-4), Pg. 10, 1989.

If not differently specified, the information 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.

12. Ecological information

Ecotoxicity
Adopt good working practices, so that the product is not released into the environment.
Toxicological information of the product:
No data available
Toxicological information of the main substances found in the product:
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 data available
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:
the Industrial Chemicals (Notification and Assessment) Act 1989 (Cwlth), including listing on the Australian Inventory of Chemical Substances (AICS), any condition of use associated with the listing on the AICS and/or whether any chemical or a chemical in the product is being introduced under a permit.
New Zealand Information:
Hazardous Substances and New Organisms Act 2020:
Meets Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2020
However, cartridges are exempt.

16. Other information

Full text of phrases referred to in Section 3:
H317 May cause an allergic skin reaction.

Safety Data Sheet dated December 15, 2022, Revision: 5.0
Paragraphs modified from the previous revision:

1. Identification
2. Hazard identification
3. Composition/information on ingredients
4. First-aid measures
7. Handling and storage
8. Exposure controls/personal protection
9. Physical and chemical properties
10. Stability and reactivity
12. Ecological information
14. Transport information
15. Regulatory information
16. Other information

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

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.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
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 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