EPSON
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Safety Data Sheet

1. Identification

GHS Product identifier

Mixture identification:

Trade name: INK CARTRIDGE,BK,700,AU T6871

Trade code: T6871

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: 4.0

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, Flam. Liq. 4, Combustible liquid.

Warning, Skin Irrit. 2, Causes skin irritation.

Warning, Repr. 2, Suspected of damaging fertility or the unborn child.

GHS label elements, including precautionary statements

Hazard pictograms:

Warning

Hazard statements:

H227 Combustible liquid.
H315 Causes skin irritation.
H361 Suspected of damaging fertility or the unborn child.

Precautionary statements:

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P370+P378 In case of fire: Use a dry powder fire extinguisher to extinguish.
P403 Store in a well-ventilated place.

P405 Store locked up.
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%	Bis(2-ethoxyethyl) ether	CAS: 112-36-7 EC: 203-963-7 REACH No.: 01-2119969946-13	2.6/4 Flam. Liq. 4 H227 3.2/2 Skin Irrit. 2 H315
20% ~ 25%	Diethylene Glycol Methyl Ethyl Ether	CAS: 1002-67-1 EC: 213-690-5	2.6/4 Flam. Liq. 4 H227 3.7/2 Repr. 2 H361
15% ~ 20%	gamma-Butyrolactone	CAS: 96-48-0 EC: 202-509-5 REACH No.: 01-2119471839-21	The product is not classified as dangerous according to GHS - Seventh revised edition.
1% ~ 3%	Carbon black	CAS: 1333-86-4 EC: 215-609-9	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.
After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:
After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.
Protect uninjured eye.
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 spray, dry chemical, carbon dioxide or alcohol-resistant foam.

In case of fire: Use a dry powder fire extinguisher to extinguish.

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.

Exercise the greatest care when handling or opening the container.

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

Always keep in a well ventilated place.

Store at below 20 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

8. Exposure controls/personal protection

Control parameters – exposure standards, biological monitoring

Carbon black - CAS: 1333-86-4

- OEL Type: ACGIH - TWA(8h): 3 mg/m3
- OEL Type: OSHA - TWA: 3.5 mg/m3
- OEL Type: JSOH - TWA: 1 mg/m3 - Notes: as Class 2 Dusts (Respirable dust)
- OEL Type: JSOH - TWA: 4 mg/m3 - Notes: as Class 2 Dusts (Total dust)

- Notes: as total dust

DNEL Exposure Limit Values

Bis(2-ethoxyethyl) ether - CAS: 112-36-7

Worker Industry: 5.96 mg/m3 - Exposure: Human Inhalation
Worker Industry: 1.71 mg/kg/day - Exposure: Human Oral
Worker Professional: 50.05 mg/m3 - Exposure: Human Inhalation - Frequency: Long Term, systemic effects
Worker Professional: 3.43 mg/kg/day - Exposure: Human Dermal - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

Bis(2-ethoxyethyl) ether - CAS: 112-36-7

Target: Fresh Water - Value: 0.001 mg/l
Target: Freshwater sediments - Value: 0.007 mg/kg
Target: Marine water - Value: 0.0001397 mg/l
Target: Marine water sediments - Value: 0.0006778 mg/kg
Target: Air - Value: 0.000001105 mg/m3

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

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

Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Black
Odour:	Slightly
Melting point / freezing point:	No data available
Boiling point or initial boiling point and boiling range:	No data available
Lower and upper explosion limit:	No data available
Flash point:	71 °C / 160 ° F
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH:	Not Relevant
Kinematic viscosity:	No data available
Solubility in water:	Soluble
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 25 °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.

11. Toxicological information

Toxicological information of the product:

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:

Bis(2-ethoxyethyl) ether - CAS: 112-36-7

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 4970 mg/kg

c) serious eye damage/irritation:

Test: Eye Irritant - Species: Rabbit Non-irritant

Diethylene Glycol Methyl Ethyl Ether - CAS: 1002-67-1

a) acute toxicity:

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

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

b) skin corrosion/irritation:

Test: Skin Irritant - Route: Dermal - Species: Rabbit Negative

c) serious eye damage/irritation:

Test: Eye Irritant - Species: Rabbit Negative

e) germ cell mutagenicity:

Test: Mutagenesis - Species: Salmonella Typhimurium Negative

g) reproductive toxicity:

Test: Reproductive Toxicity - Route: Oral - Species: Rat Negative

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;
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:

Bis(2-ethoxyethyl) ether - CAS: 112-36-7

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish > 10000 mg/l - Duration h: 96

Endpoint: LC50 - Species: Daphnia = 6600 mg/l - Duration h: 96

Diethylene Glycol Methyl Ethyl Ether - CAS: 1002-67-1

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Algae > 89.5 mg/l - Duration h: 96

Endpoint: LC50 - Species: Daphnia > 93.6 mg/l - Duration h: 48

Endpoint: LC50 - Species: Fish > 90.8 mg/l - Duration h: 96

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. Send to authorised disposal plants or for incineration under controlled conditions. 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 (Combustible) Group Standard 2020
However, cartridges are exempt.

16. Other information

Full text of phrases referred to in Section 3:

H227 Combustible liquid.
H315 Causes skin irritation.
H361 Suspected of damaging fertility or the unborn child.

Safety Data Sheet dated December 15, 2022, Revision: 4.0
Paragraphs modified from the previous revision:

1. Identification
2. Hazard identification
3. Composition/information on ingredients
4. First-aid measures
5. Fire-fighting measures
7. Handling and storage
9. Physical and chemical properties
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