

Safety Data Sheet

1. IDENTIFICATION

Product identifier

Mixture identification:

Trade name: Ink Cartridge T6021

Recommended use of the chemical and restrictions on use

Recommended use:

Ink for inkjet printing

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Supplier in Australia:

EPSON Australia Pty Limited
3 Talavera Road, North Ryde, 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

Emergency phone number

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

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

2. HAZARD(S) IDENTIFICATION

Classification of the chemical

The product is not classified as dangerous according to GHS - Fifth revised edition.

Label elements

The product is not classified as dangerous according to Australia WHS 2012.

Hazard pictograms:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

None

Hazards not otherwise classified identified during the classification process:

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

No data available

Mixtures

Hazardous components within the meaning of GHS regulation and related classifications:

65% ~ 80% Water

CAS: 7732-18-5, EC: 231-791-2

The product is not classified as dangerous according to GHS - Fifth revised edition.

12.5% ~ 15% Glycerol

CAS: 56-81-5, EC: 200-289-5

The product is not classified as dangerous according to GHS - Fifth revised edition.

1% ~ 3% Carbon black

CAS: 1333-86-4, EC: 215-609-9

The product is not classified as dangerous according to GHS - Fifth revised edition.

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1% ~ 3% Triethanol amine

CAS: 102-71-6, EC: 203-049-8

The product is not classified as dangerous according to GHS - Fifth revised edition.

4. FIRST-AID MEASURES

Description of necessary 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.

Most important symptoms/effects, acute and delayed

None

Indication of immediate medical attention and special treatment needed

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.

Methods and materials 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.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

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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.

Storage temperature:

Store at ambient temperature.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Carbon black - CAS: 1333-86-4

- OEL Type: ACGIH - LTE: 3 mg/m³

- OEL Type: NIOSH - LTE: 3.5 mg/m³ - STE: 1750 mg/m³

- OEL Type: OSHA - LTE: 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

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and colour:

Black Liquid

Odour:

Slightly

Odour threshold:

No data available

pH:

8.4 ~ 9 at 20 °C

Melting point / freezing point:

-12 °C

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:

> 120 °C / 248 °F

Evaporation rate:

No data available

Vapour pressure:

No data available

Relative density:

1.048 at 20 °C

Solubility in water:

Complete

Solubility in oil:

No data available

Partition coefficient (n-octanol/water):

No data available

Auto-ignition temperature:

No data available

Decomposition temperature:

No data available

Viscosity:

< 5 mPa·s at 20 °C

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Miscibility:	No data available
Fat Solubility:	No data available
Conductivity:	No data available
Substance Groups relevant properties	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

Information on toxicological effects

Toxicological information of the mixture:

a) acute toxicity:

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

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

b) skin corrosion/irritation:

Test: Skin Irritant - Route: Dermal - Species: Rabbit Mild irritant

c) serious eye damage/irritation:

Test: Eye Irritant - Species: Rabbit Mild irritant

d) respiratory or skin sensitisation:

Test: Skin Sensitisation - Route: LLNA 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., 1969 Vol. -, Pg. 288, 1969. - Notes: BEHAVIORAL: HEADACHE GASTROINTESTINAL: NAUSEA OR VOMITING

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

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, 1982 Vol. -, 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,

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URETER, AND BLADDER: OTHER CHANGES BEHAVIORAL: CONVULSIONS OR EFFECT ON SEIZURE THRESHOLD

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.

Substance(s) listed on the NTP report on Carcinogens:

None.

Substance(s) listed on the IARC Monographs:

Carbon black - Group 2B

Triethanol amine - Group 3.

Substance(s) listed as OSHA Carcinogen(s):

None.

Substance(s) listed as NIOSH Carcinogen(s):

None.

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

Waste treatment and 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

No data available

Environmental hazards

No data available

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)

No data available

Special precautions

No data available

15. REGULATORY INFORMATION

USA - Federal regulations

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TSCA - Toxic Substances Control Act
TSCA inventory: all the components are listed on the TSCA inventory.
TSCA listed substances:
None.

SARA - Superfund Amendments and Reauthorization Act
Section 302 – Extremely Hazardous Substances: no substances listed.
Section 304 – Hazardous substances: no substances listed.
Section 313 – Toxic chemical list: no substances listed.

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
No substances listed.

CAA - Clean Air Act
CAA listed substances:
Glycerol is listed in CAA Section 111.

CWA - Clean Water Act
CWA listed substances:
None.

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

Safety Data Sheet dated August 8, 2016, Revision: 1.0

Disclaimer:

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. The information relates only to the specific material and may not be valid for such material used in combination with any other material or in any process.

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.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

HMIS: Hazardous Materials Identification System

IARC: International Agency for Research on Cancer

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.

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NFPA:	National Fire Protection Association
NIOSH:	National Institute for Occupational Safety and Health
NTP:	National Toxicology Program
OSHA:	Occupational Safety and Health Administration
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).