

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : VERSAPASS® DN Cyan

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Inkjet printing
Recommended use : Ink and Toners
Restrictions on use : No additional information available

1.3. Supplier

Memjet, Ltd
61-62 Fitzwilliam Lane
Dublin 2, Ireland
T +353 1 678 0420
msds@memjet.com
www.memjet.com

Importer
Memjet North Ryde Pty Ltd.
6-8 Lyonpark Road
North Ryde NSW 2113 - Australia
T +61 2 8875 3100

1.4. Emergency telephone number

Emergency number : For Hazardous Materials Incidents (spill, leak, fire, exposure, or accident) call: CHEMTREC:
U.S. 1-800-424-9300 International: +1-703-527-3887; CHEMTREC (24 HOURS)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS classification

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

Full text of hazard classes and H-statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS labelling

Hazard pictograms (GHS) :



Signal word (GHS) : Warning
Hazard statements (GHS) : H373 - May cause damage to organs through prolonged or repeated exposure.
Precautionary statements (GHS) : P260 - Do not breathe mist/vapours/spray.
P314 - Get medical advice/attention if you feel unwell.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS)

1% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
1% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
1% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS classification
Water	(CAS-No.) 7732-18-5	70-80	Not classified
Ethylene glycol	(CAS-No.) 107-21-1	8	Acute Tox. 4 (Oral), H302 STOT RE 2, H373

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Name	Product identifier	%	GHS classification
Glycerol	(CAS-No.) 56-81-5	1 - 5	Not classified

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
- First-aid measures after skin contact : Gently wash with plenty of soap and water.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

4.2. Most important symptoms and effects (acute and delayed)

No additional information available

4.3. Immediate medical attention and special treatment, if necessary

No special procedures required.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : None known.

5.2. Specific hazards arising from the chemical

- Fire hazard : Presents no particular fire or explosion hazard.
- Explosion hazard : Product is not explosive.

5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Exercise caution when fighting any chemical fire. Use extinguishing media appropriate for surrounding fire.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Wear fire/flame resistant/retardant clothing. Wear a self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Take up small spills with dry chemical absorbent.

6.1.2. For emergency responders

- Emergency procedures : Take up small spills with dry chemical absorbent.

6.2. Environmental precautions

Do not discharge into drains or the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal.

6.4. Reference to other sections

Section 7: safe handling. Section 8: personal protective equipment. Section 13: disposal information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid all eye and skin contact and do not breathe vapour and mist. Use personal protective equipment as required. Do not eat, drink or smoke when using this product.
- Hygiene measures : Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in original container. Store away from heat.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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Glycerol (56-81-5)		
HCIS	TWA (mg/m ³)	10 mg/m ³
Ethylene glycol (107-21-1)		
HCIS	TWA (ppm)	20 ppm (vapour)
HCIS	STEL (mg/m ³)	10 mg/m ³
HCIS	STEL (ppm)	40 ppm (vapour)
HCIS	Remark (ACGIH)	Kidney dam; URT & eye irr

8.2. Appropriate engineering controls

Appropriate engineering controls : No special work practices are needed beyond the above recommendations under anticipated conditions of normal use.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

None under normal use.

Eye protection:

None under normal use

Respiratory protection:

None under normal use

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Blue liquid.
Colour	: Blue
Odour	: odourless
Odour threshold	: No data available
pH	: 7.1
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: > 1
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Unknown acute toxicity (GHS)	1% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 1% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 1% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))
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Glycerol (56-81-5)	
LD50 oral rat	5570 mg/kg
ATE US (oral)	5570 mg/kg bodyweight

Ethylene glycol (107-21-1)	
LD50 dermal rat	> 3500 mg/kg mouse
LC50 inhalation rat (mg/l)	> 2.5 mg/l/4h
ATE US (oral)	500 mg/kg bodyweight

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)

STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

Ethylene glycol (107-21-1)	
LOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight/day
NOAEL (oral, rat, 90 days)	150 mg/kg bodyweight/day kidney
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

Viscosity, kinematic : No data available

Likely routes of exposure : Skin and eye contact.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Glycerol (56-81-5)	
LC50 fish 1	68 - 72 mg/l

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Ethylene glycol (107-21-1)

LC50 fish 1	72860 mg/l Pimephales promelas
EC50 crustacea	> 100 mg/l
NOEC chronic fish	15380 mg/l Pimephales promelas
NOEC chronic crustacea	8590 mg/l Ceriodaphnia sp.

12.2. Persistence and degradability

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Persistence and degradability	Not established.
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Glycerol (56-81-5)

Persistence and degradability	Readily biodegradable.
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Ethylene glycol (107-21-1)

Persistence and degradability	Readily biodegradable.
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12.3. Bioaccumulative potential

Ethylene glycol (107-21-1)

Log Pow	- 1.36
Bioaccumulative potential	Not expected to bioaccumulate.

12.4. Mobility in soil

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Ecology - soil	No additional information available.
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12.5. Other adverse effects

Other information : Do not discharge into drains or the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	: Do not remove as household garbage. Dispose in a safe manner in accordance with local/national regulations.
Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Avoid release to the environment.

SECTION 14: Transport information

ADG

Not regulated.

Transport by sea

Not regulated.

Air transport

Not regulated.

SECTION 15: Regulatory information

National regulations

Glycerol (56-81-5)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on KECI (Korean Existing Chemicals Inventory)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on Taiwan National Chemical Inventory
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on NZIoC (New Zealand Inventory of Chemicals)

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Ethylene glycol (107-21-1)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on Taiwan National Chemical Inventory
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on KECI (Korean Existing Chemicals Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

SECTION 16: Other information

Data sources : ACGIH (American Conference of Government Industrial Hygienists).
European Chemicals Agency (ECHA) C&L Inventory database. Accessed at <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>.
National Fire Protection Association; Fire Protection Guide to Hazardous Materials; 10th edition.
Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition.
Manufacturer Information.
US National Library of Medicine National Institutes of Health Haz-Map. Accessed at <http://hazmap.nlm.nih.gov>.

Full text of H-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H302	Harmful if swallowed.
H373	May cause damage to organs through prolonged or repeated exposure.

Abbreviations and acronyms:

ACGIH (American Conference of Government Industrial Hygienists)
ATE Acute Toxicity Estimate
CAS (Chemical Abstracts Service) number
CLP: Classification, Labelling, Packaging.
EC50: Environmental Concentration associated with a response by 50% of the test population.
GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).
LD50: Lethal Dose for 50% of the test population
TWA: Time Weighted Average

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.