

VERSAPASS® DN Yellow

Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 12/14/2016 Revision date: 2/18/2019 Supersedes: 6/27/2018 Version: 3.0



SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name : VERSAPASS® DN Yellow

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/mixture : Inkjet printing

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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

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)

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH Birmingham	0344 892 0111	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

EUH-statements : EUH210 - Safety data sheet available on request.
EUH208 - Contains 1,2-benzisothiazolone(2634-33-5). May produce an allergic reaction.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Water	(CAS-No.) 7732-18-5 (EC-No.) 231-791-2	76	Not classified

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Ethylene glycol	(CAS-No.) 107-21-1 (EC-No.) 203-473-3 (EC Index-No.) 603-027-00-1	8	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
Glycerol	(CAS-No.) 56-81-5 (EC-No.) 200-289-5	1 - 5	Not classified
Ethoxylated acetylenic diols	(CAS-No.) 1606-85-5 (EC-No.) 216-526-0	1 - 5	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319
1,2-benzisothiazolone	(CAS-No.) 2634-33-5 (EC-No.) 220-120-9 (EC Index-No.) 613-088-00-6	0.04	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400
Specific concentration limits:			
Name	Product identifier	Specific concentration limits	
1,2-benzisothiazolone	(CAS-No.) 2634-33-5 (EC-No.) 220-120-9 (EC Index-No.) 613-088-00-6	(0.05 =<C < 100) Skin Sens. 1, H317	

Full text of 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. If you feel unwell, seek medical advice.
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.
First-aid measures after ingestion	: If swallowed, rinse mouth with water (only if the person is conscious).

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation	: None under normal use.
Symptoms/effects after skin contact	: No significant signs or symptoms indicative of any health hazard are expected to occur as a result of skin contact.
Symptoms/effects after eye contact	: No significant signs or symptoms indicative of any adverse health hazard are expected to occur as a result of eye exposure.

4.3. Indication of any immediate medical attention and special treatment needed

All treatments should be based on observed signs and symptoms of distress in the patient.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Fire hazard	: No particular fire or explosion hazard.
Explosion hazard	: Product is not explosive.

5.3. Advice for firefighters

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. EN469.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Stop leak without risks if possible. Take up small spills with dry chemical absorbent.

6.1.2. For emergency responders

Emergency procedures : Stop leak if safe to do so. 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

For containment : Absorb and/or contain spill with inert material, then place in suitable container.

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 : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container.

7.3. Specific end use(s)

Inkjet printing.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Glycerol (56-81-5)		
United Kingdom	WEL TWA (mg/m ³)	10 mg/m ³

Ethylene glycol (107-21-1)		
EU	Local name	Ethylene glycol
EU	IOELV TWA (mg/m ³)	52 mg/m ³
EU	IOELV TWA (ppm)	20 ppm
EU	IOELV STEL (mg/m ³)	104 mg/m ³
EU	IOELV STEL (ppm)	40 ppm
EU	Notes	Skin
United Kingdom	WEL TWA (mg/m ³)	52 mg/m ³ (vapour, Sk) 10 mg/m ³ (Sk)
United Kingdom	WEL TWA (ppm)	20 ppm (vapour, Sk)
United Kingdom	WEL STEL (mg/m ³)	104 mg/m ³ (vapour, Sk)
United Kingdom	WEL STEL (ppm)	40 ppm (vapour, Sk)

8.2. Exposure controls

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Impermeable protective nitrile gloves

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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	: Yellow liquid.
Colour	: Yellow.
Odour	: odourless.
Odour threshold	: No data available
pH	: 7.1
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: > 93.3 °C
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: > 1 (Air = 1)
Relative density	: No data available
Solubility	: Miscible with water.
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Product is not explosive.
Oxidising properties	: None known.
Explosive limits	: No data available

9.2. Other information

No additional information available

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 under normal use.

10.6. Hazardous decomposition products

No additional information available

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

Glycerol (56-81-5)

LD50 oral rat	5570 mg/kg
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Ethoxylated acetylenic diols (1606-85-5)

LD50 oral rat	1230 mg/kg (Based on similar product)
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Water (7732-18-5)

LC50 inhalation rat (Dust/Mist - mg/l/4h)	> 6 mg/l/4h
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Ethylene glycol (107-21-1)

LD50 dermal rat	> 3500 mg/kg mouse
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LC50 inhalation rat (mg/l)	> 2.5 mg/l/4h
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LC50 inhalation rat (Dust/Mist - mg/l/4h)	> 2.5 mg/l/4h
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Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met)
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met)
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	: Not classified (Conclusive but not sufficient for classification)

Ethylene glycol (107-21-1)

LOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight/day
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NOAEL (oral, rat, 90 days)	150 mg/kg bodyweight/day kidney
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Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)
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SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified

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

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

12.3. Bioaccumulative potential

VERSAPASS® DN Yellow	
Bioaccumulative potential	Not established.

Ethylene glycol (107-21-1)	
Log Pow	- 1.36
Bioaccumulative potential	Not expected to bioaccumulate.

12.4. Mobility in soil

VERSAPASS® DN Yellow	
Ecology - soil	No additional information available.

12.5. Results of PBT and vPvB assessment

VERSAPASS® DN Yellow	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	
Component	
Glycerol (56-81-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Ethylene glycol (107-21-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Other adverse effects : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Do not remove as household garbage. Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : Not regulated.
UN-No. (IMDG) : Not regulated.
UN-No. (IATA) : Not regulated.
UN-No. (ADN) : Not regulated.
UN-No. (RID) : Not regulated.

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not regulated.
Proper Shipping Name (IMDG) : Not regulated.
Proper Shipping Name (IATA) : Not regulated.
Proper Shipping Name (ADN) : Not regulated.
Proper Shipping Name (RID) : Not regulated.

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14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not regulated.

IMDG

Transport hazard class(es) (IMDG) : Not regulated.

IATA

Transport hazard class(es) (IATA) : Not regulated.

ADN

Transport hazard class(es) (ADN) : Not regulated.

RID

Transport hazard class(es) (RID) : Not regulated.

14.4. Packing group

Packing group (ADR) : Not regulated.

Packing group (IMDG) : Not regulated.

Packing group (IATA) : Not regulated.

Packing group (ADN) : Not regulated.

Packing group (RID) : Not regulated.

14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

Not regulated.

Transport by sea

Not regulated.

Air transport

Not regulated.

Inland waterway transport

Not regulated.

Rail transport

Not regulated.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:	
3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	Ethoxylated acetylenic diols - ethylene glycol
3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	VERSAPASS® DN Yellow - Ethoxylated acetylenic diols - ethylene glycol

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

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Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes:

Changed item	Changed item	Changed item	Changed item
2.2	EUH-statements	Added	
3	Composition/information on ingredients	Modified	
4.2	Symptoms/effects after ingestion	Added	
4.2	Chronic symptoms	Added	
15.1	REACH Annex XVII	Added	

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
NOEC: No Observable Effect Concentration
OSHA: Occupational Safety & Health Administration
PBT: Persistent, Bioaccumulative, Toxic
STEL: Short Term Exposure Limits
TSCA: Toxic Substances Control Act
TWA: Time Weighted Average

Data sources : Chemical Book; Accessed at http://www.chemicalbook.com/ChemicalProductProperty_EN_CB1712971.htm.
European Chemicals Agency (ECHA) C&L Inventory database. Accessed at <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>.
European Chemicals Agency (ECHA) Registered Substances list. Accessed at <http://echa.europa.eu/>.
European Standards: Personal Protective Equipment; accessed at: http://ec.europa.eu/enterprise/policies/european-standards/harmonised-standards/personal-protective-equipment/index_en.htm.
Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition.
National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th edition.
OSHA 29CFR 1910.1200 Hazard Communication Standard.
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.
US National Library of Medicine National Institutes of Health Haz-Map. Accessed at <http://hazmap.nlm.nih.gov>.
TSCA Chemical Substance Inventory. Accessed at <http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html>.

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
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Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
EUH208	Contains 1,2-benzisothiazolone(2634-33-5). May produce an allergic reaction.
EUH210	Safety data sheet available on request.

SDS Prepared by:

The Redstone Group
6077 Frantz Rd
Suite 206
Dublin, Ohio USA 43017
+1.614.923.7472
www.redstonegrp.com

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