

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : VERSAPASS® DN Magenta

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

Supplier

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

Distributor

Memjet, Ltd
10918 Technology Place
San Diego, CA 92127 - USA
T 858 673 3300
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)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Eye Irrit. 2 H319 Causes serious eye irritation
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 US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning
Hazard statements (GHS US) : H319 - Causes serious eye irritation
H373 - May cause damage to organs through prolonged or repeated exposure
Precautionary statements (GHS US) : P260 - Do not breathe the mist, spray.
P264 - Wash hands thoroughly after handling.
P280 - Wear eye protection, protective gloves.
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314 - Get medical advice/attention if you feel unwell.
P337+P313 - If eye irritation persists: Get medical advice/attention.
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 US)

4% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
7% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
7% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

VERSAPASS® DN Magenta

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Water	(CAS-No.) 7732-18-5	<75	Not classified
Ethylene glycol	(CAS-No.) 107-21-1	≈ 8	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
Glycerol	(CAS-No.) 56-81-5	1 - 5	Not classified
Ethoxylated acetylenic diols	(CAS-No.) 1606-85-5	1 - 5	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319
Proprietary magenta dye	(CAS-No.) not assigned	4	Eye Irrit. 2A, H319 Aquatic Chronic 2, H411
2,4,7,9-Tetramethyl-5-decyne-4,7-diol ethoxylate	(CAS-No.) 9014-85-1	1 - 1.5	Eye Dam. 1, H318 Aquatic Chronic 3, H412

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

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)

- Potential Adverse human health effects and symptoms : Causes serious eye irritation.
- Symptoms/effects after skin contact : May cause an allergic skin reaction.
- Symptoms/effects after eye contact : Causes serious eye irritation.

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.
- Reactivity : No dangerous reactions known.

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/flamm resistant/retardant clothing. Wear a self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid all eye and skin contact and do not breathe vapor and mist.

6.1.1. For non-emergency personnel

- Protective equipment : Avoid contact with skin and eyes. Wear suitable gloves. butyl rubber gloves. natural rubber gloves.
- Emergency procedures : Evacuate unnecessary personnel. Stop leak, if possible without risk.

VERSAPASS® DN Magenta

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

6.1.2. For emergency responders

Protective equipment : Avoid all eye and skin contact and do not breathe vapor and mist. Wear suitable protective clothing and gloves. butyl rubber. rubber. Use eye protection designed to protect against liquid splashes.

Emergency procedures : Stop leak if safe to do so.

6.2. Environmental precautions

Do not discharge into drains or the environment.

6.3. Methods and material for containment and cleaning up

No additional information available

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

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

Glycerol (56-81-5)		
ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³
OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total) 5 mg/m ³ (respirable fraction)
Ethoxylated acetylenic diols (1606-85-5)		
Not applicable		
2,4,7,9-Tetramethyl-5-decyne-4,7-diol ethoxylate (9014-85-1)		
Not applicable		
Water (7732-18-5)		
Not applicable		
Proprietary magenta dye (not assigned)		
Not applicable		
Ethylene glycol (107-21-1)		
ACGIH	Local name	Ethylene glycol
ACGIH	ACGIH TWA (ppm)	25 ppm
ACGIH	ACGIH STEL (mg/m ³)	10 mg/m ³
ACGIH	ACGIH STEL (ppm)	50 ppm
ACGIH	ACGIH Ceiling (mg/m ³)	100 mg/m ³
ACGIH	ACGIH Ceiling (ppm)	39.4 ppm
ACGIH	Remark (ACGIH)	Kidney dam; URT & eye irr

8.2. Appropriate engineering controls

Appropriate engineering controls : Avoid splashing. 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:

Wear suitable gloves. butyl rubber gloves. natural rubber gloves.

Eye protection:

Use splash goggles when eye contact due to splashing is possible.

VERSAPASS® DN Magenta

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Respiratory protection:

No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Magenta Liquid.
Color	: Magenta
Odor	: odorless
Odor 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 (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor 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
Oxidizing properties	: 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

Keep away from: Incompatible materials.

10.5. Incompatible materials

Oxidizing agent.

10.6. Hazardous decomposition products

No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

VERSAPASS® DN Magenta

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Glycerol (56-81-5)	
LD50 oral rat	5570 mg/kg
ATE US (oral)	5570 mg/kg body weight
Ethoxylated acetylenic diols (1606-85-5)	
LD50 oral rat	1230 mg/kg (Based on similar product)
ATE US (oral)	1230 mg/kg body weight
2,4,7,9-Tetramethyl-5-decyne-4,7-diol ethoxylate (9014-85-1)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 2 mg/l/4h

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 body weight

Skin corrosion/irritation	: Not classified. (Based on available data, the classification criteria are not met)
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: 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)

Ethoxylated acetylenic diols (1606-85-5)	
IARC group	Not listed in carcinogenicity class

Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity – single exposure	: Not classified (Based on available data, the classification criteria are not met)

Specific target organ toxicity – repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
--	--

2,4,7,9-Tetramethyl-5-decyne-4,7-diol ethoxylate (9014-85-1)	
NOAEL (subacute,oral,animal/male,28 days)	200 mg/kg body weight

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

Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)
Likely routes of exposure	: Skin and eye contact.
Potential Adverse human health effects and symptoms	: Causes serious eye irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: May cause long lasting harmful effects to aquatic life.
-------------------	---

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

2,4,7,9-Tetramethyl-5-decyne-4,7-diol ethoxylate (9014-85-1)	
LC50 fish 1	52.5 mg/l juvenile S. maximus
EC50 Daphnia 1	166 mg/l
ErC50 (algae)	15 mg/l
NOEC chronic algae	1 mg/l

Ethylene glycol (107-21-1)	
LC50 fish 1	72860 mg/l Pimephales promelas

VERSAPASS® DN Magenta

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Ethylene glycol (107-21-1)	
EC50 Daphnia 1	> 100 mg/l
NOEC chronic fish	15380 mg/l Pimephales promelas
NOEC chronic crustacea	8590 mg/l Ceriodaphnia sp.

12.2. Persistence and degradability

VERSAPASS® DN Magenta	
Persistence and degradability	Not established.

Glycerol (56-81-5)	
Persistence and degradability	Readily biodegradable.

2,4,7,9-Tetramethyl-5-decyne-4,7-diol ethoxylate (9014-85-1)	
Persistence and degradability	Not readily biodegradable.

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

12.3. Bioaccumulative potential

2,4,7,9-Tetramethyl-5-decyne-4,7-diol ethoxylate (9014-85-1)	
Bioconcentration factor (BCF REACH)	< 24
Bioaccumulative potential	Not expected to bioaccumulate.

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

12.4. Mobility in soil

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

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

Department of Transportation (DOT)

In accordance with DOT

Not applicable

Transportation of Dangerous Goods

Not applicable

Transport by sea

Not regulated.

Air transport

Not regulated.

VERSAPASS® DN Magenta

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 15: Regulatory information

15.1. US Federal regulations

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Ethylene glycol	CAS-No. 107-21-1	8%
-----------------	------------------	----

Glycerol (56-81-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Ethoxylated acetylenic diols (1606-85-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

2,4,7,9-Tetramethyl-5-decyne-4,7-diol ethoxylate (9014-85-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag

XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).

Proprietary magenta dye (not assigned)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

Ethylene glycol (107-21-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

CERCLA RQ

5000 lb

15.2. International regulations

CANADA

Glycerol (56-81-5)

Listed on the Canadian DSL (Domestic Substances List)

Ethoxylated acetylenic diols (1606-85-5)

Listed on the Canadian DSL (Domestic Substances List)

2,4,7,9-Tetramethyl-5-decyne-4,7-diol ethoxylate (9014-85-1)

Listed on the Canadian DSL (Domestic Substances List)

Proprietary magenta dye (not assigned)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

Ethylene glycol (107-21-1)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

Glycerol (56-81-5)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Ethylene glycol (107-21-1)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

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)

VERSAPASS® DN Magenta

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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)

15.3. US State regulations



WARNING

This product can expose you to ethylene glycol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Ethylene glycol (107-21-1)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
No	Yes	No	No		8700 µg/day (oral)
U.S. - California - Proposition 65 - Other information		Ingestion			

Glycerol (56-81-5)

U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Ethylene glycol (107-21-1)

U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances
U.S. - Pennsylvania - RTK (Right to Know) List

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-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2

VERSAPASS® DN Magenta

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

H302	Harmful if swallowed
H318	Causes serious eye damage
H319	Causes serious eye irritation
H373	May cause damage to organs through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

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

NFPA health hazard

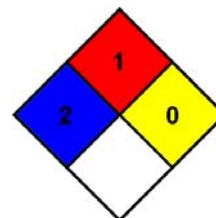
: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard

: 1 - Materials that must be preheated before ignition can occur.

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.



SDS Prepared by: The Redstone Group
6077 Frantz Rd.
Suite 206
Dublin, OH USA 43017
T 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