

Niagara Cyan

Safety Data Sheet

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

Rules and Regulations

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SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Niagara Cyan, CR1

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

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

1.3. Details of the supplier of the safety data sheet

Memjet, Ltd.
61-62 Fitzwilliam Lane
Dublin 2, - Ireland
T +353 1 678 0420

msds@memjet.com - www.memjet.com

1.4. Emergency telephone number

For Hazardous Materials Incidents (spill, leak, fire, exposure, or accident) call: : CHEMTREC, U.S. : 1-800-424-9300 International: +1-703-527-3887 Hours of Operation: 24/7

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS-US labelling

No labelling applicable

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

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-US classification
Water	(CAS No) 7732-18-5	~80	Not classified
Glycerol	(CAS No) 56-81-5	<= 5	Not classified

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

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, both acute and delayed

Symptoms/injuries after skin contact : None under normal use.
Symptoms/injuries after eye contact : None under normal use.

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Symptoms/injuries after ingestion : Not expected to present a significant ingestion hazard under anticipated conditions of normal use.

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.
Reactivity : Under normal conditions of storage and use, hazardous reactions will not occur.

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/flamm 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

Protective equipment : Avoid contact with skin and eyes.
Emergency procedures : Take up small spills with dry chemical absorbent.

6.1.2. For emergency responders

Protective equipment : Avoid all eye and skin contact and do not breathe vapor and mist.
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 : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Small spills: Wipe up with absorbent material (e.g. cloth, fleece).

6.4. Reference to other sections

Section 7: safe handling.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Hygiene measures : Always wash your hands immediately after handling this product, and once again before leaving the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool well ventilated place.
Incompatible products : None known.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Glycerol (56-81-5)		
ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³
ACGIH	Remark (ACGIH)	URT irr
OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total) 5 mg/m ³ (respirable fraction)

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8.2. Exposure controls

Appropriate engineering controls	: Avoid creating mist or spray. Avoid splashing. Either local exhaust or general room ventilation is usually required.
Hand protection	: Wear suitable gloves resistant to chemical penetration: nitrile rubber gloves.
Eye protection	: Eye protection should only be necessary where liquid could be splashed or sprayed.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Blue liquid.
Color	: Blue
Odor	: characteristic
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 (butylacetate=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

Under normal conditions of storage and use, hazardous reactions will not occur.

10.2. Chemical stability

Stable under normal 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

No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure	: Skin and eye contact
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Acute toxicity : Not classified. (Based on available data, the classification criteria are not met)

Glycerol (56-81-5)	
LD50 oral rat	5570 mg/kg
ATE US (oral)	5570.000 mg/kg bodyweight

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)

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

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

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

Potential adverse human health effects and symptoms: None under normal use.

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

12.2. Persistence and degradability

Niagara Cyan	
Persistence and degradability	Not established.
Glycerol (56-81-5)	
Persistence and degradability	Readily biodegradable.

12.3. Bioaccumulative potential

Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known effects from this product.

GWPmix comment : No known effects from this product.

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

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Do not dispose in 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 regulated.

TDG

Not regulated.

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Transport by sea

Not regulated.

Air transport

Not regulated.

SECTION 15: Regulatory information

15.1. US Federal regulations

Glycerol (56-81-5)

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

15.2. International regulations

CANADA

Glycerol (56-81-5)

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)

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)

15.3. US State regulations

Glycerol (56-81-5)

U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Minnesota - Hazardous Substance List
U.S. - Washington - Permissible Exposure Limits - STELs
U.S. - Washington - Permissible Exposure Limits - TWAs

SECTION 16: Other information

Revision date

: 4/26/2017

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>

Abbreviations and acronyms:

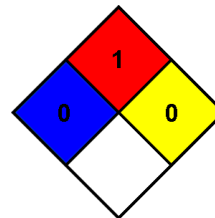
ACGIH	American Conference of Government Industrial Hygienists
ATE	Acute Toxicity Estimate
CAS	(Chemical Abstracts Service) number
CLP	Classification, Labelling, Packaging.
EC50	Environmental Concentration associated with a response by 50% of the test population.
GHS	Globally Harmonized System (of Classification and Labeling of Chemicals).
LD50	Lethal Dose for 50% of the test population
NOAEL	No Observable Adverse Effect Level
TWA	Time Weighted Average

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- NFPA health hazard : 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.
- 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.



Indication of changes:

Sections	Change	Comments
2, 3, 4, 11, 15, 16	Modified	Classification and related information due to change to non-hazardous ink component.

SDS US (GHS HazCom 2012)

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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