

SECTION 1: Identification

1.1. Identification

Product form : Mixtures
Product name : Niagara Black, CR1

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Dye.
Recommended use : Ink and Toners

1.3. Supplier

Manufacturer
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

Sensitization — Skin, H317 May cause an allergic skin reaction
Category 1

Full text of H statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS-US labelling



Hazard pictograms (GHS-US) :

GHS07

Signal word (GHS-US) :

Warning

Hazard statements (GHS-US) :

H317 - May cause an allergic skin reaction

Precautionary statements (GHS-US) :

P261 - Avoid breathing mist, spray
P272 - Contaminated work clothing must not be allowed out of the workplace
P280 - Wear protective gloves
P302+P352 - If on skin: Wash with plenty of water
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P363 - Wash contaminated clothing before reuse
P501 - Dispose in a safe manner in accordance with local/national regulations

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

2% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)

2% 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

Niagara Black

Safety Data Sheet

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

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Water	(CAS No) 7732-18-5	<75	Not classified
Ethoxylated acetylenic diols	(CAS No) Withheld	1 - 5	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319
Sulfonated azo dye	(CAS No) Withheld	1 - 5	Skin Sens. 1, H317
Glycerol	(CAS No) 56-81-5	2	Not classified

*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 : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
- First-aid measures after eye contact : Not expected to be an irritant to eyes. 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 : Not expected to present a significant ingestion hazard under anticipated conditions of normal use. IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

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

- Symptoms/injuries after inhalation : May cause an allergic skin reaction.

4.3. Immediate medical attention and special treatment, if necessary

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

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. **Water** spray. Sand.
- Unsuitable extinguishing media : None known.

5.2. Specific hazards arising from the chemical

- Reactivity : No dangerous reactions known.

5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection. Nitrile rubber. Protective gloves.
- Emergency procedures : Stop leak without risks if possible. Take up small spills with dry chemical absorbent.

6.2. Environmental precautions

No additional information available

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. Collect spillage.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

Niagara Black

Safety Data Sheet

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid breathing mist, spray.

Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container.

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)
Ethoxylated acetylenic diols		
Not applicable		
Sulfonated azo dye		
Not applicable		

8.2. Appropriate engineering controls

Appropriate engineering controls : Avoid creating mist or spray. Avoid splashing. Either local exhaust or general room ventilation is usually required.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves. nitrile rubber gloves.

Eye protection:

Eye protection should only be necessary where liquid could be splashed or sprayed.

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Black liquid.

Color : Black

Odor : characteristic

Odor threshold : No data available

pH : 7.5

Melting point : No data available

Freezing point : No data available

Boiling point : ≈ 100 °C

Flash point : No data available

Niagara Black

Safety Data Sheet

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

Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
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	: Product is not explosive.
Oxidising properties	: No oxidizing properties.

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

No additional information available

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

Likely routes of exposure : Dermal

Acute toxicity : Not classified

Glycerol (56-81-5)	
LD50 oral rat	5570 mg/kg
ATE US (oral)	5570.000 mg/kg bodyweight
Ethoxylated acetylenic diols	
LD50 oral rat	1230 mg/kg (Based on similar product)
ATE US (oral)	1230.000 mg/kg bodyweight
Sulfonated azo dye	
LD50 oral rat	> 2000 mg/kg bodyweight No mortality. OECD 423.
LD50 dermal rat	> 2000 mg/kg No mortality. OECD 402.
LC50 inhalation rat (mg/l)	> 5.1 mg/l/4h No mortality. OECD 403.
ATE US (dust,mist)	5.100 mg/l/4h

Skin corrosion/irritation : Not classified. (Not irritating to skin)

Serious eye damage/irritation : Not classified. (Not irritating to eyes)

Respiratory or skin sensitization : May cause an allergic skin reaction.

Niagara Black

Safety Data Sheet

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

Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified. (No carcinogenic effect)

Ethoxylated acetylenic diols	
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) : 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)
Symptoms/injuries after inhalation : May cause an allergic skin reaction.

SECTION 12: Ecological information

12.1. Toxicity

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

12.2. Persistence and degradability

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

12.3. Bioaccumulative potential

Niagara Black	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on ozone layer : None known
Effect on the global warming : No known effects from this product.
GWPmix comment : No known effects from this product.
Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

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 applicable

Air transport

Not applicable

Niagara Black

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

Glycerol (56-81-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Ethoxylated acetylenic diols
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Water (7732-18-5)
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) inventory.
Ethoxylated acetylenic diols
Listed on the Canadian DSL (Domestic Substances List) inventory.
Water (7732-18-5)
Listed on the Canadian DSL (Domestic Substances List) inventory.

EU-Regulations

Glycerol (56-81-5)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Ethoxylated acetylenic diols
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Water (7732-18-5)
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)
Ethoxylated acetylenic diols
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on KECI (Korean Existing Chemicals Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Inventory of Existing Chemical Substances Produced or Imported in China (IECSC).

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

Niagara Black

Safety Data Sheet

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

SECTION 16: Other information

Data sources

: ACGIH (American Conference of Government Industrial Hygienists).
Chemical Inspection & Regulation Service; accessed at: http://www.cirs-reach.com/Inventory/Global_Chemical_Inventories.html
Component Supplier SDSs.
European Chemicals Agency (ECHA) Registered Substances list.
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.
Manufacturer Information.
National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th edition.

Full text of H-statements:

H302	Harmful if swallowed
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation

Abbreviations and acronyms:

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

NFPA health hazard

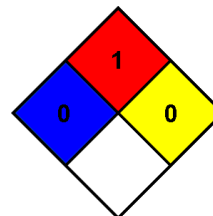
: 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.

NFPA fire hazard

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

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and not reactive with water.



SDS US (GHS HazCom 2012)

SDS prepared by:

The Redstone Group, LLC
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