

Niagara Black

Safety Data Sheet

according to Regulation (EU) 2015/830
Date of issue: 19/12/2016 Version: 1.0



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

1.1. Product identifier

Product form : Mixture
Product name : Niagara Black, CR1

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

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

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]

Sensitisation — Skin, Category 1 H317

Full text of H statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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



Hazard pictograms (CLP) :
GHS07

Signal word (CLP) : **Warning**

Hazardous ingredients : Sulfonated azo dye

Hazard statements (CLP) : H317 - May cause an allergic skin reaction

Precautionary statements (CLP) : P261 - Avoid breathing mist, spray
P272 - Contaminated work clothing should not be allowed out of the workplace
P280 - Wear protective gloves
P302+P352 - IF ON SKIN: Wash with plenty of water

Niagara Black

Safety Data Sheet

according to Regulation (EU) 2015/830

P321 - Specific treatment (see supplemental first aid instruction on this label)
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P501 - Dispose in a safe manner in accordance with local/national regulations

2.3. Other hazards

No additional information available

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	<75	Not classified
Ethoxylated acetylenic diols: Ethanol, 2,2'-(2-butyne-1,4-diylbis(oxy))bis-	(CAS No) 1606-85-5 (EC no) 216-526-0	2	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319
Sulfonated azo dye: 1,7-Naphthalenedisulfonic acid, 4-amino-3-[2-(2,4-disulfophenyl)diazenyl]-5-hydroxy-6-[2-(4-nitro-2-sulfophenyl)diazenyl]-, sodium salt (1:5)	(CAS No) 1422649-48-6	3.9	Skin Sens. 1, H317
Glycerol	(CAS No) 56-81-5 (EC no) 200-289-5	2	Not classified

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.
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, both acute and delayed

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

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 : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

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.

Niagara Black

Safety Data Sheet

according to Regulation (EU) 2015/830

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.

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.

7.3. Specific end use(s)

Ink.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Glycerol (56-81-5)		
Belgium	Limit value (mg/m ³)	10 mg/m ³
Belgium	Remark (BE)	(brouillard)
Czech Republic	Expoziční limity (PEL) (mg/m ³)	10 mg/m ³
Czech Republic	Expoziční limity (PEL) (ppm)	2.44 ppm
Czech Republic	Expoziční limity (NPK-P) (mg/m ³)	15 mg/m ³
Czech Republic	Expoziční limity (NPK-P) (ppm)	3.66 ppm
Finland	HTP-arvo (8h) (mg/m ³)	20 mg/m ³
France	VME (mg/m ³)	10 mg/m ³
France	Note (FR)	(aérosols de)
Ireland	OEL (8 hours ref) (mg/m ³)	10 mg/m ³
Poland	NDS (mg/m ³)	10 mg/m ³

Niagara Black

Safety Data Sheet

according to Regulation (EU) 2015/830

Glycerol (56-81-5)		
Slovakia	NPHV (priemerná) (mg/m ³)	10 mg/m ³
Spain	VLA-ED (mg/m ³)	10 mg/m ³
United Kingdom	WEL TWA (mg/m ³)	10 mg/m ³
Switzerland	VME (mg/m ³)	50 mg/m ³
Switzerland	VLE (mg/m ³)	100 mg/m ³
Switzerland	Remark (CH)	(inhalable aerosol)
Canada (Quebec)	VEMP (mg/m ³)	10 mg/m ³
USA - ACGIH	Local name	Glycerin mist
USA - ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³
USA - ACGIH	Remark (ACGIH)	URT irr
USA - OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total) 5 mg/m ³ (respirable fraction)

8.2. Exposure controls

Appropriate engineering controls:

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

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves. nitrile rubber gloves. EN374

Eye protection:

Eye protection should only be necessary where liquid could be splashed or sprayed. EN166

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.
Colour	: Black.
Odour	: characteristic.
Odour threshold	: No data available
pH	: 7.5
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: ≈ 100 °C
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available

Niagara Black

Safety Data Sheet

according to Regulation (EU) 2015/830

Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Product is not explosive.
Oxidising properties	: No oxidizing properties.
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

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

Acute toxicity : Not classified

Glycerol (56-81-5)	
LD50 oral rat	5570 mg/kg
Ethoxylated acetylenic diols (1606-85-5)	
LD50 oral rat	1230 mg/kg (Based on similar product)
Sulfonated azo dye (1422649-48-6)	
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.
LC50 inhalation rat (Dust/Mist - mg/l/4h)	5.1 mg/l/4h No mortality. OECD 403.

Skin corrosion/irritation	: Not classified (Not irritating to skin)
Serious eye damage/irritation	: Not classified (Not irritating to eyes)
Respiratory or skin sensitisation	: Skin sensitizer
Germ cell mutagenicity	: Not classified (Negative results for in vivo and in vivo mammalian genotoxicity tests.)
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 (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)

Niagara Black

Safety Data Sheet

according to Regulation (EU) 2015/830

SECTION 12: Ecological information

12.1. Toxicity

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

12.2. Persistence and degradability

Niagara Black	
Biodegradation	5.9 % 28 days
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. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

Additional information : Avoid release to the environment

SECTION 13: Disposal considerations

13.1. Waste treatment 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

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

14.1. UN number

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

14.2. UN proper shipping name

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

14.3. Transport hazard class(es)

ADR
Transport hazard class(es) (ADR) : Not applicable

IMDG
Transport hazard class(es) (IMDG) : Not applicable

Niagara Black

Safety Data Sheet

according to Regulation (EU) 2015/830

IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

RID

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable

Packing group (IMDG) : Not applicable

Packing group (IATA) : Not applicable

Packing group (ADN) : Not applicable

Packing group (RID) : Not applicable

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 applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

- Inland waterway transport

Not applicable

- Rail transport

Not applicable

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

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Niagara Black

Safety Data Sheet

according to Regulation (EU) 2015/830

Indication of changes:
Original Document.

Abbreviations and acronyms:

ATE:	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

Data sources : ACGIH (American Conference of Government Industrial Hygienists).
Chemical Inspection & Regulation Service; accessed at: http://www.cirs-reach.com/Inventory/Global_Chemical_Inventories.htm
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.
Kristen 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- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, Category 1
H302	Harmful if swallowed
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Skin Sens. 1	H317	Calculation method
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SDS EU (REACH Annex II)

SDS prepared by:
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