



Safety Data Sheet

TR-100-FJ/TR-100-FJT SDS INTRODUCTORY BRIEF

INTRODUCTORY SHEET

Fluoro-Jade C Ready-to-Dilute Staining Kits Safety Data Sheet Information

Catalog number(s): TR-100-FJ/TR-100-FJT

MANUFACTURER:

Biosensis Pty. Ltd.
51 West Thebarton Road,
Thebarton, South Australia, 5031
Email sales@biosensis.com • www.biosensis.com

EMERGENCY TELEPHONE NUMBERS:

Telephone + 61 8 83527711; (800) 222-1222

Revision: February 2019

KIT COMPONENTS:

Solution A: Sodium Hydroxide 2% in distilled water
Solution B: Potassium Permanganate 0.6% in distilled water
Solution C: Fluoro-Jade C .001% in 1% in acetic acid in distilled water
Solution D: DAPI .001% in distilled water

SDS to follow below

Part 1 of 4:

Solution A: Sodium Hydroxide 2% in distilled water

SECTION 1: Chemical Product and Company Identification

MANUFACTURER:

Biosensis Pty. Ltd.
51 West Thebarton Road,
Thebarton, South Australia, 5031
Email sales@biosensis.com • www.biosensis.com
Revision: February 2019

EMERGENCY TELEPHONE NUMBERS:

Telephone + 61 8 83527711; (800) 222-1222

Product Form: Mixture

Product Name: Solution A: Sodium Hydroxide 2% in distilled water

1.2. Recommended use and restrictions on use

Use of the substance/mixture : For laboratory and manufacturing use only.

Recommended use : Laboratory chemicals

Restrictions on use : Not for food, drug or household use

1.3. Supplier

Biosensis Pty. Ltd. Telephone + 61 8 83527711; (800) 222-1222
51 West Thebarton Road,
Thebarton, South Australia, 5031
Email sales@biosensis.com • www.biosensis.com

1.4. Emergency telephone number

Emergency number : Telephone + 61 8 83527711; (800) 222-1222

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin corrosion/irritation

Category 1B

H314 Causes severe skin burns and eye damage

Serious eye damage/eye

irritation Category 1

H318 Causes serious eye damage

H314 Causes severe skin burns and eye damage

H318 Causes serious eye damage

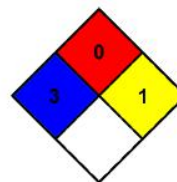
H402 Harmful to aquatic life

NFPA health hazard : 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 1 - Materials that in themselves are normally stable but can become unstable at elevated temperatures and pressures.

Hazard Rating



Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high

temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.

Personal protection : D

D - Face shield and eye protection, Gloves, Synthetic apron

2.2. GHS Label elements, including precautionary statements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

H314 - Causes severe skin burns and eye damage

Precautionary statements (GHS-US) :

P260 - Do not breathe mist, spray, vapors.

P264 - Wash exposed skin thoroughly after handling.

P280 - Wear eye protection, face protection, protective clothing, protective gloves.

P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a poison center or doctor/physician.

P363 - Wash contaminated clothing before reuse.

P405 - Store locked up.

P501 - Dispose of contents/container to Comply with applicable regulations

If inhaled: Remove person to fresh air and keep comfortable for breathing

2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification

: None.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Name	Product Identifier	%	GHS-US Classification
Water	7732-18-5 CAS-No.	98%	Not Classified
Sodium Hydroxide	1310-73-2	2%	Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402

H314 Causes severe skin burns and eye damage

H318 Causes serious eye damage

H402 Harmful to aquatic life

NFPA health hazard : 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 1 - Materials that in themselves are normally stable but can become unstable at elevated temperatures and pressures.

Hazard Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

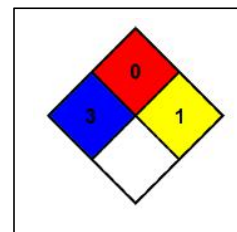
Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high

temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.

Personal protection : D

D - Face shield and eye protection, Gloves, Synthetic apron



SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.

First-aid measures after skin contact : Immediately call a poison center or doctor/physician. Remove/Take off immediately all

contaminated clothing. Rinse skin with water/shower.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. Immediately call a poison center or doctor/physician.

First-aid measures after ingestion : Do NOT induce vomiting. Immediately call a poison center or doctor/physician. Rinse mouth.

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

02-14-2019/MSDS FJ/LMF Rev 12 FOR RESEARCH USE ONLY

4

51 West Thebarton Road, Thebarton, South Australia, 5031

Tel/Fax: + 61 8 83527711 • Email sales@biosensis.com • www.biosensis.com

Symptoms/effects : Causes severe skin burns and eye damage.
Symptoms/effects after inhalation : Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes.
Symptoms/effects after skin contact : Caustic burns/corrosion of the skin.
Symptoms/effects after eye contact : Causes serious eye damage.
Symptoms/effects after ingestion : Abdominal pain. Bleeding of the gastrointestinal tract. Burns to the gastric/intestinal mucosa.
Nausea. Possible esophageal perforation.
Symptoms/effects upon intravenous administration
: Not available.
Chronic symptoms : Not available.

4.3. Immediate medical attention and special treatment, if necessary

Obtain medical assistance.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Carbon dioxide. Dry powder. Water spray. Foam. Sand.

Unsuitable extinguishing media : Not available. Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : Not flammable.

Explosion hazard : Not available.

Reactivity : Reacts with (some) metals: release of highly flammable gases/vapours (hydrogen).

Thermal

decomposition generates : Corrosive vapors.

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. In case of fire, stop leak if safe to do so. When cooling/extinguishing: no water in the substance. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Other information : Not available.

SECTION 6: ACCIDENTAL RELEASE MEASURES:

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Eliminate ignition sources. Ensure adequate ventilation. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe.

6.1.1. For non-emergency personnel

Protective equipment : Wear chemically protective gloves, lab coat or apron to prevent prolonged or repeated skin contact.

Emergency procedures : Wash contaminated clothes. Evacuate unnecessary personnel. Keep containers closed.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Stop leak if safe to do so. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Take up liquid spill into inert absorbent material.

Methods for cleaning up : Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Wash

clothing and equipment after handling. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : May be corrosive to metals.

Precautions for safe handling : Do not get in eyes, on skin, or on clothing. Remove contaminated clothing immediately. Use corrosion proof equipment. Wash hands and other exposed areas with mild soap and water

before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not breathe mist, spray, vapors.

Hygiene measures : Wash exposed skin thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Keep container closed when not in use. Store in original container. Keep only in the original

container in a cool, well ventilated place away from : incompatible materials.

Incompatible products : Strong acids. metals.

Incompatible materials : Sources of ignition. Direct sunlight.

Storage temperature : 5 - 30 °C

Prohibitions on mixed storage : KEEP SUBSTANCE AWAY FROM: strong acids. metals. metal powders.

Storage area : Keep locked up. Store in a well-ventilated place. Keep only in the original container.

Special rules on packaging : SPECIAL REQUIREMENTS: corrosion-proof.

Packaging materials : Do not store incorrodable metal.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Water (7732-18-5): Not applicable

Sodium Hydroxide (1310-73-2)

ACGIH ACGIH Ceiling (mg/m³) 2 mg/m³

OSHA OSHA PEL (TWA) (mg/m³) 2 mg/m³

IDLH US IDLH (mg/m³) 10 mg/m³

NIOSH NIOSH REL (ceiling) (mg/m³) 2 mg/m³

8.2. Appropriate engineering controls

Appropriate engineering controls : Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Gloves. Safety glasses. Protective clothing. Head/neck protection. Chemical resistant apron.



Hand protection:

Wear chemically resistant protective gloves.
Wear protective gloves.

Eye protection:

Chemical goggles or face shield

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Respiratory protection not required in normal conditions

Thermal hazard protection:

None necessary.

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 : Clear, colorless liquid.

Color : clear Colorless

Odor : odorless

Odor threshold : No data available

pH : ≥ 14

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) : Non flammable.

Vapor pressure : No data available

Relative vapor density at 20 °C : No data available

Relative density : No data available

Specific gravity / density : 1.05 g/ml

Solubility : No data available

Log Pow : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

available

Viscosity, kinematic : 1.24 cSt

Viscosity, dynamic : No data available

Explosion 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

Reacts with (some) metals: release of highly flammable gases/vapours (hydrogen). Thermal decomposition generates : Corrosive vapors.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reacts vigorously with strong oxidizers and acids.

10.4. Conditions to avoid

Incompatible materials. Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

metals. Strong acids.

10.6. Hazardous decomposition products

Sodium oxide. Thermal decomposition generates : Corrosive vapors.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure : Skin and eye contact

Acute toxicity : Not classified

Sodium Hydroxide, 2% w/v

LD50 dermal rabbit 28421 mg/kg

ATE US (dermal) 28421 mg/kg body weight

Water (7732-18-5)

LD50 oral rat \geq 90000 mg/kg

ATE US (oral) 90000 mg/kg body weight

Skin corrosion/irritation : Causes severe skin burns and eye damage. pH: \geq 14

Serious eye damage/irritation : Causes serious eye damage. pH: \geq 14

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Based on available data, the classification criteria are not met

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Based on available data, the classification criteria are not met

Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity – repeated exposure: Not classified

Aspiration hazard : Not classified

Potential Adverse human health effects and symptoms: Based on available data, the classification criteria are not met.

Symptoms/effects after inhalation : Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes.

Symptoms/effects after skin contact : Caustic burns/corrosion of the skin.

Symptoms/effects after eye contact : Causes serious eye damage.

Symptoms/effects after ingestion : Abdominal pain. Bleeding of the gastrointestinal tract. Burns to the gastric/intestinal mucosa.

Nausea. Possible esophageal perforation.

Symptoms/effects upon intravenous administration: Not available.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Ecology - water : Toxic to aquatic life.

Sodium Hydroxide, 2% w/v

LC50 fish 1 956 mg/l

EC50 Daphnia 1 851 mg/l

Sodium Hydroxide (1310-73-2)

LC50 fish 1 45.4 mg/l (Other, 96 h, Salmo gairdneri, Static system, Fresh water, Experimental value)

EC50 Daphnia 1 40.4 mg/l (Other, 48 h, Ceriodaphnia sp., Experimental value)

12.2. Persistence and degradability

Sodium Hydroxide, 2% w/v

Persistence and degradability Not established.

Water (7732-18-5)

Persistence and degradability Not established.

Sodium Hydroxide (1310-73-2)

Persistence and degradability Biodegradability: not applicable.

Biochemical oxygen demand (BOD)
Not applicable (inorganic) Chemical oxygen demand (COD)
Not applicable (inorganic) ThOD
Not applicable (inorganic)

12.3. Bioaccumulative potential

Sodium Hydroxide, 2% w/v

Bioaccumulative potential Not established.

Water (7732-18-5)

Bioaccumulative potential Not established.

Sodium Hydroxide (1310-73-2)

Bioaccumulative potential Not bioaccumulative.

12.4. Mobility in soil

Sodium Hydroxide (1310-73-2)

Ecology - soil No (test) data on mobility of the substance available.

12.5. Other adverse effects

Other adverse effects : May cause pH changes in aqueous ecological systems.

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste disposal recommendations : Dispose of contents/container to comply with local, state and federal regulations. 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

Transport document description : UN1824 Sodium hydroxide solution, 8, II

UN-No.(DOT) : UN1824

Proper Shipping Name (DOT) : Sodium hydroxide solution

Transport hazard class(es) (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136

Packing group (DOT) : II - Medium Danger

Hazard labels (DOT) : 8 - Corrosive



DOT Packaging Non Bulk (49 CFR 173.xxx) : 202

DOT Packaging Bulk (49 CFR 173.xxx) : 242

DOT Special Provisions (49 CFR 172.102) : B2 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized.

IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.

N34 - Aluminum construction materials are not authorized for any part of a packaging which is normally in contact with the hazardous material.

T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3)

TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: t_r is the maximum mean bulk temperature during transport, t_f is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (t_f) and the maximum mean bulk temperature during transportation (t_r) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: Where: d_{15} and d_{50} are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.

DOT Packaging Exceptions (49 CFR 173.xxx) : 154

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27): 1 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75): 30 L

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

DOT Vessel Stowage Other : 52 - Stow "separated from" acids

Other information : No supplementary information available.

SECTION 15: Regulatory information

15.1. US Federal regulations

Sodium Hydroxide, 2% w/v

SARA Section 311/312 Hazard Classes: Immediate (acute) health hazard

All components of this product are listed, or excluded from listing, on the United States

Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Sodium Hydroxide (1310-73-2)

RQ (Reportable quantity, section 304 of EPA's List of Lists) 1000 lb

SARA Section 311/312 Hazard Classes: Immediate (acute) health hazard

15.2. International regulations

CANADA

No additional information available

Sodium Hydroxide (1310-73-2): Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations: No additional information available

National regulations: No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: OTHER INFORMATION:

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Biosensis be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Biosensis has been advised of the possibility of such damages.

Part 2 of 4

Solution B: Potassium Permanganate 0.6% in distilled water

SECTION 1: Chemical Product and Company Identification

MANUFACTURER:

Biosensis Pty. Ltd.
 51 West Thebarton Road,
 Thebarton, South Australia, 5031
 Email sales@biosensis.com • www.biosensis.com

Revision: February 2019

Product Form: Mixture

Product Name: Solution B: Potassium Permanganate 0.6% in distilled water

EMERGENCY TELEPHONE NUMBERS:

Telephone + 61 8 83527711; (800) 222-1222

1.2. Recommended use and restrictions on use

Use of the substance/mixture : For laboratory and manufacturing use only.

Recommended use : Laboratory chemicals

Restrictions on use : Not for food, drug or household use

1.3. Supplier

Biosensis Pty. Ltd. Telephone + 61 8 83527711; (800) 222-1222

51 West Thebarton Road,

Thebarton, South Australia, 5031

Email sales@biosensis.com • www.biosensis.com

1.4. Emergency telephone number

Emergency number : Telephone + 61 8 83527711; (800) 222-1222

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

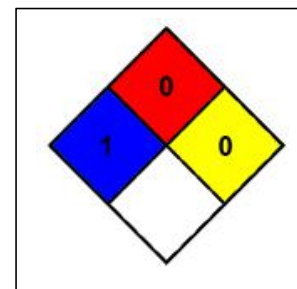
Hazardous to the aquatic environment - Acute

Hazard Category 3

H402 Harmful to aquatic life

Hazardous to the aquatic environment - Chronic
Hazard Category 3

H412 Harmful to aquatic life with long lasting effects



H272 May intensify fire; oxidizer

H302 Harmful if swallowed

H400 Very toxic to aquatic life

H402 Harmful to aquatic life

H410 Very toxic to aquatic life with long lasting effects

H412 Harmful to aquatic life with long lasting effects

NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

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

Hazard Rating

Health : 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection : B

B - Safety glasses, Gloves

2.2. GHS Label elements, including precautionary statements

GHS-US labeling

Hazard statements (GHS-US) : H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (GHS-US) : P273 - Avoid release to the environment.

P501 - Dispose of contents/container to comply with local, state and federal regulations



Pictogram(s):

Signal Word:

None

Hazard Statement(s):

H411 – Toxic to aquatic life with long lasting effects.

Precautionary statement(s):

P273 – Avoid release to the environment

2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification: None under normal conditions.

2.4. Unknown acute toxicity (GHS US)

Not applicable

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	99.4	Not classified
Potassium Permanganate	(CAS-No.) 7722-64-7	0.60	Ox. Sol. 2, H272 Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.

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.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

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

4.3. Immediate medical attention and special treatment, if necessary

Obtain medical assistance.

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 : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

No additional information available

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. Prevent fire-fighting water from entering environment.

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

Protective equipment : Safety glasses. Gloves.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to 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. Collect spillage. Store away from other materials.

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. Provide good ventilation in process area to prevent formation of vapor.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Light sensitive. Keep container closed when not in use.

Incompatible products : Strong reducing agents. Strong bases.

Incompatible materials : Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Potassium Permanganate (7722-64-7)		
ACGIH	ACGIH TWA (mg/m³) 0.1 mg	0.1 mg/m ³ (Manganese, inorganic compounds, as Mn; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Inhalable fraction)
OSHA	OSHA PEL (Ceiling) (mg/m³)	5 mg/m ³ as Mn
IDLH	US IDLH (mg/m³)	500 mg/m ³ as Mn
NIOSH	NIOSH REL (TWA) (mg/m³)	1 mg/m ³ as Mn
NIOSH	NIOSH REL (ceiling) (mg/m³)	3 mg/m ³ as Mn
Water (7732-18-5)		
Not applicable		
Not applicable		

8.2. Appropriate engineering controls

Appropriate engineering controls : Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Gloves. Safety glasses.



Hand protection: Wear protective Gloves

Eye protection: Chemical goggles or safety glasses

Respiratory Protection: Respiratory protection not required in normal conditions.

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

Color : Purple

Odor : None.

Odor threshold : No data available

pH : No data available

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) : Non flammable.

Vapor pressure : No data available

Relative vapor density at 20 °C : No data available

Relative density : No data available

Specific gravity / density : 1 g/ml

Solubility : Soluble in water.

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

Explosion 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 additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong reducing agents. Strong bases.

10.6. Hazardous decomposition products

manganese. oxygen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure : Skin and eye contact
Acute toxicity : Not classified

Potassium Permanganate (7722-64-7)
LD50 oral rat 1090 mg/kg (Rat)
ATE US (oral): 1090 mg/kg body weight

Water (7732-18-5)
LD50 oral rat \geq 90000 mg/kg
ATE US (oral): 90000 mg/kg body weight

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity – single exposure : Not classified
Specific target organ toxicity – repeated exposure: Not classified
Aspiration hazard : Not classified
Potential Adverse human health effects and symptoms: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1 Toxicity

Ecology - water : Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

Potassium Permanganate (7722-64-7)
EC50 Daphnia 1 0.235 mg/l (EC50; 24 h)
LC50 fish 2 1.22 mg/l (LC50; 96 h)
Threshold limit algae 1 10 mg/l (EC50; 4 h)

12.2. Persistence and degradability

Potassium Permanganate, 0.60% w/v: Persistence and degradability , May cause long-term adverse effects in the environment.

Potassium Permanganate (7722-64-7):
Persistence and degradability: Biodegradability: not applicable.
Biochemical oxygen demand (BOD): not applicable
Chemical oxygen demand (COD): not applicable
ThOD; not applicable

Water:(7732-18-5)

Persistence and degradability: not established.

12.3. Bioaccumulative potential

Potassium Permanganate, 0.60% w/v: Not established

Potassium Permanganate (7722-64-7):

Log Pow -1.73 (Estimated value)

Bioaccumulative potential: not applicable

Water:(7732-18-5)

Bioaccumulative potential: Not established.

12.4 Mobility in soil

No information available

12.5. Other adverse effects

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. Dispose of

contents/container to comply with local, state and federal regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

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 are:

Potassium Permanganate, CAS-No. 7722-64-7, 0.60%

Potassium Permanganate (7722-64-7)

RQ (Reportable quantity, section 304 of EPA's List of Lists): 100 lb

SARA Section 311/312 Hazard Classes: Reactive hazard

15.2. International regulations

CANADA

Potassium Permanganate (7722-64-7)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Potassium Permanganate (7722-64-7)

Listed on the Canadian IDL (Ingredient Disclosure List)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: OTHER INFORMATION:

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Biosensis be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Biosensis has been advised of the possibility of such damages.

Part 3 of 4

Solution C: Fluoro-Jade C .001% in 1% in acetic acid in distilled water

SECTION 1: Chemical Product and Company Identification

MANUFACTURER:

Biosensis Pty. Ltd.
51 West Thebarton Road,
Thebarton, South Australia, 5031
Email sales@biosensis.com • www.biosensis.com

Revision: February 2019

Product Form: Mixture

EMERGENCY TELEPHONE NUMBERS:

Telephone + 61 8 83527711; (800) 222-1222

Product Name: Solution C: Fluoro-Jade C .001% in 1% in acetic acid in distilled water

1.2. Recommended use and restrictions on use

Use of the substance/mixture : For laboratory and manufacturing use only.

Recommended use : Laboratory chemicals

Restrictions on use : Not for food, drug or household use

1.3. Supplier

Biosensis Pty. Ltd. Telephone + 61 8 83527711; (800) 222-1222
51 West Thebarton Road,
Thebarton, South Australia, 5031
Email sales@biosensis.com • www.biosensis.com

1.4. Emergency telephone number

Emergency number : Telephone + 61 8 83527711; (800) 222-1222

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. Label elements

Not classified as a hazardous chemical.

2.3. Other hazards

Other hazards not contributing to the classification: **None**

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substance

Not applicable

3.2. Mixture Name

Water

Acetic Acid

Product identifier
 (CAS No) 7732-18-5
 (CAS No) 64-19-7

%
 98.999
 1

GHS-US classification

Not classified
 Flam. Liq. 3, H226
 Skin Corr. 1B, H314
 Eye Dam. 1, H318
 Aquatic Acute 3, H402
 Not classified

Fluoro-Jade C

N/A

0.001%w/v

H226 Flammable liquid and vapor
 H314 Causes severe skin burns and eye damage
 H318 Causes serious eye damage
 H402 Harmful to aquatic life

NFPA health hazard: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard: 0 - Materials that will not burn.

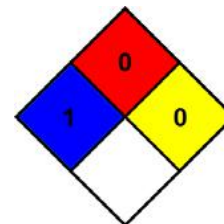
NFPA reactivity: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

HMIS III Rating Health: 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection: B, B - Safety glasses, Gloves



SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation: Allow victim to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/injuries after skin contact: Causes skin irritation.

Symptoms/injuries after eye contact: Causes serious eye irritation.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

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. Prevent fire-fighting water from entering environment.

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

Protective equipment: Safety glasses. Gloves.

Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment: Equip cleanup crew with proper protection.

Emergency procedures: Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

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. Store away from other materials.

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. Provide good ventilation in process area to prevent formation of vapor.

Hygiene measures : Wash exposed skin thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container closed when not in use.

Incompatible products: Strong bases. Strong oxidizers. metals.

Incompatible materials: Sources of ignition. Direct sunlight.

02-14-2019/MSDS FJ/LMF Rev 12 FOR RESEARCH USE ONLY

21

51 West Thebarton Road, Thebarton, South Australia, 5031

Tel/Fax: + 61 8 83527711 • Email sales@biosensis.com • www.biosensis.com

SECTION 8: Exposure controls/personal protection

8.1. Control parameters Acetic Acid (64-19-7)

ACGIH	ACGIH TWA (ppm)	10 ppm (Acetic acid; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
ACGIH	ACGIH STEL (ppm)	15 ppm (Acetic acid; USA; Short time value; TLV - Adopted Value)
OSHA	OSHA PEL (TWA) (mg/m ³)	25 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	10 ppm
IDLH	US IDLH (ppm)	50 ppm
NIOSH	NIOSH REL (TWA) (mg/m ³)	25 mg/m ³
NIOSH	NIOSH REL (TWA) (ppm)	10 ppm
NIOSH	NIOSH REL (STEL) (mg/m ³)	37 mg/m ³
NIOSH	NIOSH REL (STEL) (ppm)	15 ppm

Water (7732-18-5)

Not applicable

Fluoro-Jade C:

Not available

8.2. Exposure controls

Appropriate engineering controls: Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

Personal protective equipment: Avoid all unnecessary exposure.

Hand protection: Wear protective gloves.

Eye protection: Chemical goggles or safety glasses.

Respiratory protection: Respiratory protection not required in normal conditions.

Other information: Do not eat, drink or smoke during use

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Gloves. Safety glasses.



Hand protection: Wear protective Gloves

Eye protection: Chemical goggles or safety glasses

Respiratory Protection: Respiratory protection not required in normal conditions.

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	pH: No data available
Color: Colorless to pale yellow	Melting point: No data available
Odor: Vinegar odour	Freezing point: No data available
Odor threshold: No data available	Boiling point: No data available

02-14-2019/MSDS FJ/LMF Rev 12 FOR RESEARCH USE ONLY

22

51 West Thebarton Road, Thebarton, South Australia, 5031

Tel/Fax: + 61 8 83527711 • Email sales@biosensis.com • www.biosensis.com

Safety Data Sheet

Flash point: No data available
Relative evaporation rate (butyl acetate=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
Specific gravity / density: 1 g/ml
Solubility: Soluble in water.

9.2. Other information

No additional information available

Log Pow: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity, kinematic: 1.022 cSt
Viscosity, dynamic: No data available
Explosion limits: No data available
Explosive properties: No data available
Oxidizing properties: No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong oxidizers. Strong bases. metals.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure: Inhalation; Skin and eye contact

Acute toxicity: Not classified

Water (7732-18-5): LD50 oral rat \geq 90000 mg/kg

ATE US (oral) 90000.000 mg/kg body weight

DAPI: No data available

Skin corrosion/irritation: Not classified

Serious eye damage/irritation: Not classified

Respiratory or skin sensitization: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

Specific target organ toxicity (single exposure): Not classified

Specific target organ toxicity (repeated exposure): Not classified

Aspiration hazard: Not classified

Potential Adverse human health effects and symptoms: Based on available data, the classification criteria are not met.

Symptoms/injuries after skin contact: Causes skin irritation.

Symptoms/injuries after eye contact: Causes serious eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

Persistence and degradability: Not established.

12.3. Bioaccumulative potential

Bioaccumulative potential: Not established

Water (7732-18-5)

Bioaccumulative potential

Not established

12.4. Mobility in soil

Mobility in soil: Not established

12.5. Other adverse effects

Effect on the global warming

GWPmix comment

:

:

No known effects from this product.

No known effects from this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations. The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Ecology - waste materials: Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

SECTION 15: Regulatory information

U.S. Federal regulations:

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): Not determined.

Clean Air Act Section 112

(b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances: Not listed

Clean Air Act Section 602 Class II Substances: Not Listed

DEA List I Chemicals (Precursor Chemicals): Not Listed

DEA List II Chemicals (Essential Chemicals): Not Listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

No products were found.

15.2. International regulations

International regulations

International lists :

Australia inventory (AICS): Not determined.

China inventory (IECSC): All components are listed or exempted.

Japan inventory: Not determined.

Korea inventory: Not determined.

Malaysia Inventory (EHS Register): Not determined.

Water (7732-18-5)

WHMIS Classification

Uncontrolled product according to
WHMIS classification criteria

15.3. US State regulations

State regulations Massachusetts None of the components are listed.

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : None of the components are listed.

Canada inventory : Not determined.

SECTION 16: OTHER INFORMATION:

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Biosensis be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Biosensis has been advised of the possibility of such damages.

Part 4 of 4

Solution D: DAPI .001% in distilled water

SECTION 1: Chemical Product and Company Identification

MANUFACTURER:

Biosensis Pty. Ltd.
51 West Thebarton Road,
Thebarton, South Australia, 5031
Email sales@biosensis.com • www.biosensis.com

Revision: February 2019

Product Form: Mixture

Product Name: Solution D: DAPI .001% in distilled water

EMERGENCY TELEPHONE NUMBERS:

Telephone + 61 8 83527711; (800) 222-1222

1.2. Recommended use and restrictions on use

Use of the substance/mixture : For laboratory and manufacturing use only.

Recommended use : Laboratory chemicals

Restrictions on use : Not for food, drug or household use

1.3. Supplier

Biosensis Pty. Ltd. Telephone + 61 8 83527711; (800) 222-1222

51 West Thebarton Road,
Thebarton, South Australia, 5031

Email sales@biosensis.com • www.biosensis.com

1.4. Emergency telephone number

Emergency number : Telephone + 61 8 83527711; (800) 222-1222

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

2.2. GHS Label elements, including precautionary statements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.

Response : Not applicable.

Storage: Not applicable.

Disposal : Not applicable.

Hazards not otherwise classified : None known.

SECTION 3: Composition/Information on ingredients

3.1. Substance

Not applicable

3.2. Mixture Name

Water

Product identifier
(CAS No) 7732-18-5

%
98.999

GHS-US classification
Not classified

DAPI

(CAS No) 28718-90-3

0.001%w/v

Not classified

NFPA health hazard: 0 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard: 0 - Materials that will not burn.

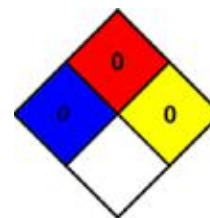
NFPA reactivity: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

HMIS III Rating Health: 0 Slight Hazard - Irritation or minor reversible injury possible

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection: B, B - Safety glasses, Gloves



SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation: Allow victim to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/injuries after skin contact: Causes skin irritation.

Symptoms/injuries after eye contact: Causes serious eye irritation.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Foam. Dry powder. Carbon dioxide. Water spray. Sand.

02-14-2019/MSDS FJ/LMF Rev 12 FOR RESEARCH USE ONLY

51 West Thebarton Road, Thebarton, South Australia, 5031

Tel/Fax: + 61 8 83527711 • Email sales@biosensis.com • www.biosensis.com

Unsuitable extinguishing media : Do not use a heavy water stream.

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. Prevent fire-fighting water from entering environment.

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

Protective equipment: Safety glasses. Gloves.

Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment: Equip cleanup crew with proper protection.

Emergency procedures: Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

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. Store away from other materials.

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. Provide good ventilation in process area to prevent formation of vapor.

Hygiene measures : Wash exposed skin thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep container closed when not in use.

Incompatible products: Strong bases. Strong oxidizers. metals.

Incompatible materials: Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1 Exposure Parameters

28718-90-3 DAPI (hydrochloride)

CAS # Partial Chemical Name

28718-90-3 DAPI (hydrochloride)

Britain EH40

No data.

OSHA TWA

No data.

France VL

No data.

ACGIH TWA

No data.

Europe

No data.

Other Limits

No data.

Water (7732-18-5)

Not applicable

8.2. Exposure controls

Appropriate engineering controls: Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

Personal protective equipment: Avoid all unnecessary exposure.

Hand protection: Wear protective gloves.

Eye protection: Chemical goggles or safety glasses.

Respiratory protection: Respiratory protection not required in normal conditions.

Other information: Do not eat, drink or smoke during use

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Gloves. Safety glasses.



Hand protection: Wear protective Gloves

Eye protection: Chemical goggles or safety glasses

Respiratory Protection: Respiratory protection not required in normal conditions.

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

Color: Colorless to pale yellow

Odor: no odour

Odor threshold: No data available

pH: No data available

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): Non flammable.

Vapor pressure: No data available

Relative vapor density at 20 °C: No data available

Relative density: No data available

Specific gravity / density: 1 g/ml

Solubility: Soluble in water.

Log Pow: No data available

Auto-ignition temperature: No data available

Decomposition temperature: No data available

Viscosity, kinematic: 1.022 cSt

Viscosity, dynamic: No data available

Explosion 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 additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong oxidizers. Strong bases. metals.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide.

Section 11. Toxicological information

Information on toxicological effects Acute toxicity: Not available.

Conclusion/Summary : To the best of our knowledge, the toxicological properties of this product have not been thoroughly investigated.

Irritation/Corrosion:Not available.

Sensitization:Not available.

Mutagenicity:Not available.

Carcinogenicity:Not available.

Reproductive toxicity:Not available.

Teratogenicity:Not available.

Specific target organ toxicity (single exposure):Not available.

Specific target organ toxicity (repeated exposure):Not available.

Aspiration hazard:Not available.

Information on the likely routes of exposure

Potential acute health effects: Routes of entry anticipated: Oral, Dermal, Inhalation.

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.

Inhalation: No specific data.

Skin contact : No specific data.

Ingestion: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects: Not available.

Potential delayed effects: Not available.

Long term exposure: Not available

Potential immediate effects: Not available.

Potential delayed effects : Not available.

Potential chronic health effects: Not available.

General: No known significant effects or critical hazards.
 Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Teratogenicity : No known significant effects or critical hazards.
 Developmental effects : No known significant effects or critical hazards.
 Fertility effects : No known significant effects or critical hazards.
 Numerical measures of toxicity Acute toxicity estimates: Not available.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

Persistence and degradability: Not established.

12.3. Bioaccumulative potential

Bioaccumulative potential: Not established

Water (7732-18-5)

Bioaccumulative potential Not established

DAPI 0.001%

Bioaccumulative potential Not established

12.4. Mobility in soil

Mobility in soil: Not established

<u>12.5. Other adverse effects</u> :	No known effects from this product.
Effect on the global warming	
GWPmix comment :	No known effects from this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations.

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Ecology - waste materials: Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

TSCA 8(a) CDR Exempt/Partial exemption:

Not determined

United States inventory (TSCA 8b): Not determined.

Clean Air Act Section 112

(b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances:

Not listed

Clean Air Act Section 602 Class II Substances:

Not Listed

DEA List I Chemicals (Precursor Chemicals):

Not Listed

DEA List II Chemicals (Essential Chemicals):

Not Listed

SARA 302/304

Composition/information on ingredients: No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312 Classification : Not

applicable.

Composition/information on ingredients:No

products were found.

15.2. International regulations

International regulations

International lists :

Australia inventory (AICS): Not determined.

China inventory (IECSC): All components are listed or exempted.

Japan inventory: Not determined.

Korea inventory: Not determined.

Malaysia Inventory (EHS Register): Not determined.

Water (7732-18-5)

WHMIS Classification

Uncontrolled product according to WHMIS classification criteria

15.3. US State regulations

State regulations Massachusetts: None of the components are listed.

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : None of the components are listed.

Canada inventory : Not determined.

SECTION 16: OTHER INFORMATION:

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use.

Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Biosensis be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Biosensis has been advised of the possibility of such damages.