BIO-52082
BIO-52038

ISOLATE Fecal DNA Kit
Safety Data Sheet

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

1.1. Product identifier

Product form : Mixture

Product name : Lysis Buffer

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial use
Professional use

Use of the substance/mixture : Laboratory use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Bioline (Aust) Pty Ltd
Suite 111, National Innovation Centre Building Australian Technology Park, Eveleigh, NSW 2015 Australia

P: +61 (0)2 9209 4180
F: +61 (0)2 9209 4763
E-mail: tech@bioline.com

1.4. Emergency telephone number

Emergency number : +61 2 8014 4558 (Australia)
(24 hours, 7 days)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

No labelling obligation.

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Edetate Disodium, Dihydrate	(CAS No) 6381-92-6 (EC No.) 613-386-6	< 20	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Skin), H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Acute Tox 4 (Inhalation), H332 STOT SE 3 (Respiratory Tract), H335 STOT RE 2(Respiratory System), H373 Aquatic Chronic 3, H412

Full text of H-statements: see section 16

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 to fresh air, keep the patient warm and at rest. If symptoms persist, obtain medical attention.

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 symptoms develop, obtain medical attention.

First-aid measures after eye contact : Rinse immediately with plenty of water. Ensure that folded skin of eyelids is thoroughly washed with water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth. Give 100 - 200 ml of water to drink. If symptoms develop, obtain medical attention.

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

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

: May cause slight irritation to eyes.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Not flammable.

Hazardous decomposition products in case of fire : Carbon monoxide. Carbon dioxide.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Avoid fire-fighting water entering the environment.

Protection during firefighting : As in any fire, wear self-contained breathing apparatus and full protective gear.

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. Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing and gloves.

Emergency procedures : Avoid contact with eyes, skin and clothing.

6.2. Environmental precautions

Notify authorities if large amounts of the product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Absorb with non-combustible material (sand or similar) and transfer to containers for later disposal.

6.4. Reference to other sections

SECTION 8: Exposure controls/personal protection.

SECTION 13: Disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide adequate ventilation. Avoid contact with skin, eyes and clothing.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Take off contaminated clothing and wash before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool well ventilated place. Keep container closed when not in use.

Incompatible materials : Strong oxidizing agents.

7.3. Specific end use(s)

Laboratory use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Provide adequate ventilation.

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves. Standard EN 374 - Protective gloves against chemicals. The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed. Gloves should be removed and replaced if there are any signs of degradation or breakthrough

Eye protection:

Wear safety glasses with side shields. Standard EN 166 - Personal eye-protection

Skin and body protection:

Long sleeved protective clothing

Respiratory protection:

Not required for normal conditions of use

Thermal hazard protection:

Not required for normal conditions of use.

Other information:

Do not eat, drink or smoke during use. Handle in accordance with good industrial hygiene and safety procedures.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Colourless.
Odour	:	Odourless.
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	Not applicable.
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Not applicable
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	≈ 1 (Water = 1)
Solubility	:	Water: Miscible
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	Not explosive.
Oxidising properties	:	No data available
Explosive limits	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
Stable under normal conditions.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
None known.

10.4. Conditions to avoid
Extremely high or low temperatures.

10.5. Incompatible materials
Strong oxidizing agents.

10.6. Hazardous decomposition products
Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Edetate Disodium, Dihydrate (6381-92-6)	
LD50 oral rat	2000 mg/kg

Skin corrosion/irritation : Not classified

Additional information : Based on available data, the classification criteria are not met

Serious eye damage/irritation : Not classified

Additional information : Based on available data, the classification criteria are not met

Respiratory or skin sensitisation : Not classified

Additional information : Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified

Based on available data, the classification criteria are not met

Carcinogenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : Not classified

Additional information : Based on available data, the classification criteria are not met

Specific target organ toxicity (repeated exposure) : Not classified

Additional information : Based on available data, the classification criteria are not met

Aspiration hazard : Not classified

Additional information : Based on available data, the classification criteria are not met

Potential adverse human health effects and symptoms : Not expected to present a significant hazard under anticipated conditions of normal use.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Not classified.

Edetate Disodium, Dihydrate (6381-92-6)	
LC50 fish	> 500 mg/L 96 Hours (Leuciscus idus)
EC50 daphnia	> 100 mg/L 24 Hours
EC50 Algae	> 10 – 100 mg/L 72 Hours

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

Lysis Buffer	
Ecology - soil	Miscible with water.

12.5. Results of PBT and vPvB assessment

Lysis Buffer
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

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

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	: 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

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	: 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

Abbreviations and acronyms:

	ADR (Accord Europeen relatif au transport international des marchandises Dangereuses par Route)
	ATE Acute Toxicity Estimate
	CAS (Chemical Abstracts Service) Number
	CLP (Classification, Labelling and Packaging)
	DNEL (Derived No Effect Limit)
	EC (European Community)
	EC50 (Effective Concentration 50 %)
	EN (European Norm)
	IARC (International Agency for Research on Cancer
	IATA (International Air Transport Association)
	IBC (Intermediate Bulk Container)
	IMDG (International Maritime Dangerous Goods Code)
	IMO (International Maritime Organisation)
	LC50 (Lethal Concentration 50 %)
	LD50 (Lethal Dose 50 %)
	MAC (Maximum Allowed Concentration)
	O/W (Oil in Water (chemistry))
	OECD (Organsation for Economic Co-operation and Development)
	PBT (Persistent, Bioaccumulative and Toxic)
	PMcc (Pensky-Martens Closed Cup test)
	PNEC (Predicted No Effect Concentration)
	REACH (Registration, Evaluation and Authorisation of CHemicals)
	RID (Règlement concernant le transport international ferroviaire de marchandises)
	STEL (Short Term Exposure Limit)
	TWA (Time Weighted Average)
	UNxxxx (Number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods)
	vPvB (very Persistent and very Bioaccumulative)

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

NCEC SDS EU BlackandWhite

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

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

1.1. Product identifier

Product form : Mixture

Product name : Fecal DNA Binding Buffer

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial use
Professional use

Use of the substance/mixture : Laboratory use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Bioline (Aust) Pty Ltd
Suite 111, National Innovation Centre Building Australian Technology Park, Eveleigh, NSW 2015 Australia

P: +61 (0)2 9209 4180
F: +61 (0)2 9209 4763
E-mail: tech@bioline.com

1.4. Emergency telephone number

Emergency number : +61 2 8014 4558 (Australia)
(24 hours, 7 days)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin Corrosion Category 1C, H314
Eye Damage Category 1, H318
Acute Toxicity (Oral) Category 4, H302
Aquatic Chronic Category 3, H412

Full text of hazard classes and 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] Extra labelling to display. Extra classification(s) to display.

Hazard pictograms (CLP) :

Signal word (CLP) : Danger
Hazardous ingredients : Guanidinium Thiocyanate

SECTION 2: Hazards identification

Hazardous Statements (CLP) : H314 – Causes severe skin burns and eye damage
H318 – Causes serious eye damage
H302 – Harmful if swallowed
H412 – Harmful to aquatic life with long lasting effects

Precautionary Statements (CLP) : P280 – Wear eye protection, protective gloves, protective clothing
P305 + P351 + P388 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing
P310 – Immediately call a doctor.
P273 – Avoid release into the environment.

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Guanidinium Thiocyanate	(CAS No) 593-84-0 (EC No.) 209-812-1	< 50	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Skin), H312 Skin Corr. 1C, H314 Eye Dam. 1, H318 Acute Tox 4 (Inhalation), H332 Aquatic Chronic 3, H412
Glycerol	(CAS No) 56-81-5 (EC No.) 200-289-5	< 50	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 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 to fresh air, keep the patient warm and at rest. If symptoms persist, obtain medical attention.

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 symptoms develop, obtain medical attention.

First-aid measures after eye contact : Rinse immediately with plenty of water. Ensure that folded skin of eyelids is thoroughly washed with water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth. Give 100 - 200 ml of water to drink. If symptoms develop, obtain medical attention.

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

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

Symptoms/injuries after eye contact : May cause slight irritation to eyes.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Not flammable.

Hazardous decomposition products in case of fire : Hydrogen cyanide; ammonia; oxides of carbon, nitrogen and sulphur.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Avoid fire-fighting water entering the environment.

Protection during firefighting : As in any fire, wear self-contained breathing apparatus and full protective gear.

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. Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing and gloves.

Emergency procedures : Avoid contact with eyes, skin and clothing.

6.2. Environmental precautions

Notify authorities if large amounts of the product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Absorb with non-combustible material (sand or similar) and transfer to containers for later disposal.

6.4. Reference to other sections

SECTION 8: Exposure controls/personal protection.

SECTION 13: Disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide adequate ventilation. Avoid contact with skin, eyes and clothing.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Take off contaminated clothing and wash before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool well ventilated place. Keep container closed when not in use.

Incompatible materials : Strong oxidizing agents.

7.3. Specific end use(s)

Laboratory use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Glycerol (56-81-5)		
United Kingdom	Local name	Glycerol
United Kingdom	WEL TWA (mg/m³)	10 mg/m³ mist
Australia	Local name	Glycerin mist
Australia	TWA (mg/m³)	10 mg/m³
Australia	Remark (AU)	(a)

8.2. Exposure controls

Appropriate engineering controls:

Provide adequate ventilation.

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves. Standard EN 374 - Protective gloves against chemicals. The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed. Gloves should be removed and replaced if there are any signs of degradation or breakthrough

Eye protection:

Wear safety glasses with side shields. Standard EN 166 - Personal eye-protection

Skin and body protection:

Long sleeved protective clothing

Respiratory protection:

Not required for normal conditions of use

Thermal hazard protection:

Not required for normal conditions of use.

Other information:

Do not eat, drink or smoke during use. Handle in accordance with good industrial hygiene and safety procedures.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Colourless.
Odour	:	Odourless.
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	Not applicable.
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Not applicable
Vapour pressure	:	0.1 hPa at 20 °C
Relative vapour density at 20 °C	:	No data available
Relative density	:	≈ 1 (Water = 1)
Solubility	:	Water: Miscible
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	Not explosive.
Oxidising properties	:	No data available
Explosive limits	:	Lower: 0.9 Vol % Upper: 0.0 Vol %

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Extremely high or low temperatures.

10.5. Incompatible materials

Acids and Strong oxidizing agents.

10.6. Hazardous decomposition products

Products of thermal decomposition: Hydrogen cyanide; ammonia; oxides of carbon, nitrogen and sulphur.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : H302 – Harmful if swallowed

Additional information :

Glycerol (56-81-5)	
LD50 oral rat	27200 mg/kg
LD50 dermal	56750 mg/kg (Guinea pig)
LC50 inhalation rat (mg/l)	> 2.75 mg/l/4h

Guanidinium thiocyanate (593-84-0)	
LD50 oral rat	593 mg/kg
LD50 Intraperitoneal mouse	300 mg/kg

Skin corrosion/irritation : H314 – Skin Cor. 1 C

Additional information : Caustic effect on skin and mucous membranes

Serious eye damage/irritation : H318 – Eye Dam. 1

Additional information : Strong caustic effect

Respiratory or skin sensitisation : Not classified

Additional information : No Sensitizing effects known

Germ cell mutagenicity : Not classified

Based on available data, the classification criteria are not met

Carcinogenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : Not classified

Additional information : Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of oesophagus and stomach

Specific target organ toxicity (repeated exposure) : Not classified

Additional information : Based on available data, the classification criteria are not met

Aspiration hazard : Not classified

Additional information : Based on available data, the classification criteria are not met

Potential adverse human health effects and symptoms : Not expected to present a significant hazard under anticipated conditions of normal use.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : H412 – Harmful to aquatic life with long lasting effects.

Glycerol (56-81-5)	
LC50 fish	54000 mg/l 96 Hours (Salmo gairdneri)

Guanidinium thiocyanate (593-84-0)	
EC50 daphnia and other aquatic invertebrates	> 42.4 mg/L 48 Hours (Daphnia)

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

Fecal DNA Binding Buffer	
Ecology - soil	Miscible with water.

12.5. Results of PBT and vPvB assessment

Fecal DNA Binding Buffer
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

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

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

14.1. UN number

UN-No. (ADR)	: UN1760
UN-No. (IMDG)	: UN1760
UN-No. (IATA)	: UN1760
UN-No. (ADN)	: UN1760
UN-No. (RID)	: UN1760

14.2. UN proper shipping name

Proper Shipping Name	: Corrosive liquids, n.o.s. (Guanidinium thiocyanate)
Proper Shipping Name (IMDG)	: CORROSIVE LIQUIDS, N.O.S. (Guanidinium thiocyanate)
Proper Shipping Name (IATA)	: CORROSIVE LIQUIDS, N.O.S. (Guanidinium thiocyanate)
Proper Shipping Name (ADN)	: Corrosive liquids, n.o.s. (Guanidinium thiocyanate)
Proper Shipping Name (RID)	: Corrosive liquids, n.o.s. (Guanidinium thiocyanate)

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 8 Corrosive Substances

IMDG

Transport hazard class(es) (IMDG) : 8 Corrosive Substances

IATA

Transport hazard class(es) (IATA) : 8 Corrosive Substances

ADN

Transport hazard class(es) (ADN) : 8 Corrosive Substances

RID

Transport hazard class(es) (RID) : 8 Corrosive Substances

14.4. Packing group

Packing group	: III
Packing group (IMDG)	: III
Packing group (IATA)	: III
Packing group (ADN)	: III
Packing group (RID)	: III

14.5. Environmental hazards

Dangerous for the environment	: Not applicable
Marine pollutant	: Not applicable
Other information	: No supplementary information available

14.6. Special precautions for user

Overland transport

Danger code (Kemler) : 80

Transport by sea

IMDG Limited Quantities (LQ) : 5 L

IMDG Excepted Quantities (EQ) : Code E1
: Maximum net quantity per inner packaging: 30 ml
: Maximum net quantity per outer packaging: 1000 ml

Stowage Category : A

Stowage Code : SW2 Clear of living quarters

EMS Number : F-A, S-B

Air transport

DOT Quantity Limitations : On passenger aircraft/rail: 5 L
On cargo aircraft only: 60 L

Inland waterway transport

Not applicable

Rail transport

DOT Quantity Limitations : On passenger aircraft/rail: 5 L

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

Abbreviations and acronyms:

	ADR (Accord Europeen relatif au transport international des marchandises Dangereuses par Route)
	ATE Acute Toxicity Estimate
	CAS (Chemical Abstracts Service) Number
	CLP (Classification, Labelling and Packaging)
	DNEL (Derived No Effect Limit)
	EC (European Community)
	EC50 (Effective Concentration 50 %)
	EN (European Norm)
	IARC (International Agency for Research on Cancer
	IATA (International Air Transport Association)
	IBC (Intermediate Bulk Container)
	IMDG (International Maritime Dangerous Goods Code)
	IMO (International Maritime Organisation)
	LC50 (Lethal Concentration 50 %)
	LD50 (Lethal Dose 50 %)
	MAC (Maximum Allowed Concentration)
	O/W (Oil in Water (chemistry))
	OECD (Organsation for Economic Co-operation and Development)
	PBT (Persistent, Bioaccumulative and Toxic)
	PMcc (Pensky-Martens Closed Cup test)
	PNEC (Predicted No Effect Concentration)
	REACH (Registration, Evaluation and Authorisation of CHemicals)
	RID (Règlement concernant le transport international ferroviaire de marchandises)
	STEL (Short Term Exposure Limit)
	TWA (Time Weighted Average)
	UNxxxx (Number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods)
	vPvB (very Persistent and very Bioaccumulative)

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

NCEC SDS EU BlackandWhite

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

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

1.1. Product identifier

Product form : Mixture

Product name : DNA Pre-Wash Buffer

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial use
Professional use

Use of the substance/mixture : Laboratory use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Bioline (Aust) Pty Ltd
Suite 111, National Innovation Centre Building Australian Technology Park, Eveleigh, NSW 2015 Australia

P: +61 (0)2 9209 4180
F: +61 (0)2 9209 4763
E-mail: tech@bioline.com

1.4. Emergency telephone number

Emergency number : +61 2 8014 4558 (Australia)
(24 hours, 7 days)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute Toxicity (Oral) Category 4, H302
Skin Irritant Category 2, H315
Eye Irritant Category 2A, H319
Flammable Liquid Category 2, H225
STOT SE Category 3, H336

Full text of hazard classes and 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] Extra labelling to display. Extra classification(s) to display.

Hazard pictograms (CLP) :

Signal word (CLP) : Danger
Hazardous ingredients : Guanidinium Chloride; Propan-2-ol

Hazardous Statements (CLP) : H302 – Harmful if swallowed
H315 – Causes skin irritation
H319 – Causes serious eye irritation
H336 – May cause drowsiness or dizziness

Precautionary Statements (CLP) : P280 – Wear eye protection, protective gloves, protective clothing
P304 + P340 – IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305 + P351 + P388 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing
P310 – Immediately call a doctor.

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Guanidinium Chloride	(CAS No) 50-01-1 (EC No.) 200-002-3	< 50	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319
Propan-2-ol	(CAS No) 67-63-0 (EC No.) 200-661-7	< 50	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3 (Inhalation), H336

Full text of H-statements: see section 16

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). Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the incident.

First-aid measures after inhalation : Remove to fresh air, keep the patient warm and at rest. If symptoms persist, obtain medical attention. In case of unconsciousness, place patient in side position for transportation.

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 symptoms develop, obtain medical attention.

First-aid measures after eye contact : Rinse immediately with plenty of water. Ensure that folded skin of eyelids is thoroughly washed with water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth. Give 100 - 200 ml of water to drink. If symptoms develop, obtain medical attention.

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

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

Symptoms/injuries after eye contact : May cause serious irritation to eyes.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Not flammable.

Hazardous decomposition products in case of fire : Carbon monoxide. Carbon dioxide.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Avoid fire-fighting water entering the environment.

Protection during firefighting : As in any fire, wear self-contained breathing apparatus and full protective gear.

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. Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing and gloves.

Emergency procedures : Avoid contact with eyes, skin and clothing.

6.2. Environmental precautions

Notify authorities if large amounts of the product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Absorb with non-combustible material (sand or similar) and transfer to containers for later disposal.

6.4. Reference to other sections

SECTION 8: Exposure controls/personal protection.

SECTION 13: Disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide adequate ventilation. Avoid contact with skin, eyes and clothing. Prevent formation of Aerosols. Keep ignition sources away. Protect against electrostatic charges.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Take off contaminated clothing and wash before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool well ventilated place. Keep container closed when not in use.

Incompatible materials : Strong oxidizing agents.

7.3. Specific end use(s)

Laboratory use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

Propan-2-ol (67-63-0)		
United Kingdom	Local name	Propan-2-ol
United Kingdom	EH40 WEL TWA (mg/m³)	999 mg/m³
United Kingdom	EH40 WEL STEL (mg/m³)	1250 mg/m³
Australia	Local name	Propan-2-ol
Australia	TWA (mg/m³)	983 mg/m³
Australia	STEL (mg/m³)	1230 mg/m³

Propan-2-ol (67-63-0)	
BEI	40 mg/L
Medium	Urine
Time	End of shift at end of work week
Parameter	Acetone (background, non-specific)

8.2. Exposure controls

Appropriate engineering controls:

Provide adequate ventilation.

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves. Standard EN 374 - Protective gloves against chemicals. The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed. Gloves should be removed and replaced if there are any signs of degradation or breakthrough

Eye protection:

Wear safety glasses with side shields. Standard EN 166 - Personal eye-protection

Skin and body protection:

Long sleeved protective clothing

Respiratory protection:

Not required for normal conditions of use

Thermal hazard protection:

Not required for normal conditions of use.

Other information:

Do not eat, drink or smoke during use. Handle in accordance with good industrial hygiene and safety procedures.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Colourless.
Odour	:	Alcohol-like.
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	> 80 °C (> 176 °F).
Flash point	:	13 °C (55 °F)
Auto-ignition temperature	:	Product is not self igniting
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Not applicable
Vapour pressure	:	43 hPa (33 mm Hg) at 20 °C
Relative vapour density at 20 °C	:	No data available
Relative density	:	≈ 1 (Water = 1)
Solubility	:	Water: Miscible
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	Not explosive. However formation of explosive vapour mixtures are possible
Oxidising properties	:	No data available
Explosive limits	:	Upper limit: 12.0 Vol % Lower limit: 2.0 Vol %

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
Stable under normal conditions.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
None known.

10.4. Conditions to avoid
Extremely high or low temperatures.

10.5. Incompatible materials
None known.

10.6. Hazardous decomposition products
None known

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity : H302 – Acute Toxicity 4

Additional information : Harmful if swallowed

Guanidinium Chloride (50-01-1)	
LD50 oral rat	593 mg/kg
LD50 intraperitoneal mouse	300 mg/kg

Skin corrosion/irritation : H315 – Skin Irritant 2

Additional information : Causes skin irritation

Serious eye damage/irritation : H319 – Eye Irritant 2A

Additional information : Causes serious eye irritation

Respiratory or skin sensitisation : Not classified

Additional information : Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified

Based on available data, the classification criteria are not met

Carcinogenicity : Not classified

Additional information : This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification. IARC: 3 – Group 3: Not classifiable as to its carcinogenicity to humans (2-Propanol)

Reproductive toxicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : H336 – STOT SE 3

Additional information : May cause drowsiness or dizziness

Specific target organ toxicity (repeated exposure) : Not classified

Additional information : Based on available data, the classification criteria are not met

Aspiration hazard : Not classified

Additional information : Based on available data, the classification criteria are not met

Potential adverse human health effects and symptoms : Not expected to present a significant hazard under anticipated conditions of normal use.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Not classified.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

DNA Pre-Wash Buffer	
Ecology - soil	Miscible with water.

12.5. Results of PBT and vPvB assessment

DNA Pre-Wash Buffer
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

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

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

14.1. UN number

UN-No. (ADR) : UN1219
UN-No. (IMDG) : UN1219
UN-No. (IATA) : UN1219
UN-No. (ADN) : UN1219
UN-No. (RID) : UN1219

14.2. UN proper shipping name

Proper Shipping Name : Isopropanol mixture
Proper Shipping Name (IMDG) : ISOPROPANOL (ISOPROPYL ALCOHOL) mixture
Proper Shipping Name (IATA) : Isopropanol (Isopropyl alcohol) mixture
Proper Shipping Name (ADN) : Isopropanol (Isopropyl alcohol) mixture
Proper Shipping Name (RID) : ISOPROPANOL (ISOPROPYL ALCOHOL) mixture

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 3 Flammable Liquids

IMDG

Transport hazard class(es) (IMDG) : 3 Flammable Liquids

IATA

Transport hazard class(es) (IATA) : 3 Flammable Liquids

ADN

Transport hazard class(es) (ADN) : 3 Flammable Liquids

RID

Transport hazard class(es) (RID) : 3 Flammable Liquids

14.4. Packing group

Packing group : II
Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II

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

Danger code (Kemler) : 33

Transport by sea

IMDG Limited Quantities (LQ) : 5 L

IMDG Excepted Quantities (EQ) : Code E2
: Maximum net quantity per inner packaging: 30 ml
: Maximum net quantity per outer packaging: 500 ml

Stowage Category : B
EMS Number : F-E, S-D

Air transport

DOT Quantity Limitations : On passenger aircraft/rail: 5 L
On cargo aircraft only: 60 L

Inland waterway transport

Not applicable

Rail transport

DOT Quantity Limitations : On passenger aircraft/rail: 5 L

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

Abbreviations and acronyms:

	ADR (Accord Europeen relatif au transport international des marchandises Dangereuses par Route)
	ATE Acute Toxicity Estimate
	CAS (Chemical Abstracts Service) Number
	CLP (Classification, Labelling and Packaging)
	DNEL (Derived No Effect Limit)
	EC (European Community)
	EC50 (Effective Concentration 50 %)
	EN (European Norm)
	IARC (International Agency for Research on Cancer
	IATA (International Air Transport Association)
	IBC (Intermediate Bulk Container)
	IMDG (International Maritime Dangerous Goods Code)
	IMO (International Maritime Organisation)
	LC50 (Lethal Concentration 50 %)
	LD50 (Lethal Dose 50 %)
	MAC (Maximum Allowed Concentration)
	O/W (Oil in Water (chemistry))
	OECD (Organsation for Economic Co-operation and Development)
	PBT (Persistent, Bioaccumulative and Toxic)
	PMcc (Pensky-Martens Closed Cup test)
	PNEC (Predicted No Effect Concentration)
	REACH (Registration, Evaluation and Authorisation of CHemicals)
	RID (Règlement concernant le transport international ferroviaire de marchandises)
	STEL (Short Term Exposure Limit)
	TWA (Time Weighted Average)
	UNxxxx (Number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods)
	vPvB (very Persistent and very Bioaccumulative)

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

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

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

1.1. Product identifier

Product form : Mixture

Product name : Fecal DNA Wash Buffer

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial use
Professional use

Use of the substance/mixture : Laboratory use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Bioline (Aust) Pty Ltd
Suite 111, National Innovation Centre Building Australian Technology Park, Eveleigh, NSW 2015 Australia

P: +61 (0)2 9209 4180
F: +61 (0)2 9209 4763
E-mail: tech@bioline.com

1.4. Emergency telephone number

Emergency number : +61 2 8014 4558 (Australia)
(24 hours, 7 days)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Eye Irritant Category 2A, H319
Flammable Liquid Category 2, H225
STOT SE Category 3, H336

Full text of hazard classes and 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] Extra labelling to display. Extra classification(s) to display.

Hazard pictograms (CLP) :

Signal word (CLP) : Warning
Hazardous ingredients : Ethanol; Propan-2-ol

Hazardous Statements (CLP) : H319 – Causes serious eye irritation
H225 – Flammable liquid and vapor
H336 – May cause drowsiness or dizziness

Precautionary Statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P280 – Wear eye protection, protective gloves, protective clothing
P305 + P351 + P388 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing
P310 – Immediately call a doctor.

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ethanol	(CAS No) 64-17-5 (EC No.) 200-578-6	< 25	Flam. Liq. 2, H225 Eye Irrit. 2, H319
Propan-2-ol	(CAS No) 67-63-0 (EC No.) 200-661-7	< 25	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3 (Inhalation), H336

Full text of H-statements: see section 16

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 to fresh air, keep the patient warm and at rest. If symptoms persist, obtain medical attention.

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 symptoms develop, obtain medical attention.

First-aid measures after eye contact : Rinse immediately with plenty of water. Ensure that folded skin of eyelids is thoroughly washed with water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth. Give 100 - 200 ml of water to drink. If symptoms develop, obtain medical attention.

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

Symptoms/injuries : Inhalation of vapors, mists or sprays can cause drowsiness, dizziness, and other central nervous system effects.

Symptoms/injuries after eye contact : May cause serious irritation to eyes.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Not flammable.

Hazardous decomposition products in case of fire : Carbon monoxide and Carbon dioxide.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Avoid fire-fighting water entering the environment.

Protection during firefighting : As in any fire, wear self-contained breathing apparatus and full protective gear.

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. Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing and gloves.

Emergency procedures : Avoid contact with eyes, skin and clothing.

6.2. Environmental precautions

Notify authorities if large amounts of the product enters sewers or public waters. Dilute with plenty of water

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Absorb with non-combustible material (sand or similar) and transfer to containers for later disposal.
Ensure adequate ventilation

6.4. Reference to other sections

SECTION 8: Exposure controls/personal protection.

SECTION 13: Disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide adequate ventilation. Avoid contact with skin, eyes and clothing. Prevent formation of Aerosols. Keep ignition sources away. Protect against electrostatic charges.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Take off contaminated clothing and wash before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool well ventilated place. Keep container closed when not in use.

Incompatible materials : Acids and strong oxidizers.

7.3. Specific end use(s)

Laboratory use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

Ethanol (64-17-5)		
United Kingdom	Local name	Ethanol
United Kingdom	EH40 WEL TWA (mg/m³)	1920 mg/m³
Australia	Local name	Ethanol
Australia	TWA (mg/m³)	1880 mg/m³

Propan-2-ol (67-63-0)		
United Kingdom	Local name	Propan-2-ol
United Kingdom	EH40 WEL TWA (mg/m³)	999 mg/m³
United Kingdom	EH40 WEL STEL (mg/m³)	1250 mg/m³
Australia	Local name	Propan-2-ol
Australia	TWA (mg/m³)	983 mg/m³
Australia	STEL (mg/m³)	1230 mg/m³

Propan-2-ol (67-63-0)	
BEI	40 mg/L
Medium	Urine
Time	End of shift at end of work week
Parameter	Acetone (background, non-specific)

8.2. Exposure controls

Appropriate engineering controls:

Provide adequate ventilation.

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves. Standard EN 374 - Protective gloves against chemicals. The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed. Gloves should be removed and replaced if there are any signs of degradation or breakthrough

Eye protection:

Wear safety glasses with side shields. Standard EN 166 - Personal eye-protection

Skin and body protection:

Long sleeved protective clothing

Respiratory protection:

Not required for normal conditions of use

Thermal hazard protection:

Not required for normal conditions of use.

Other information:

Do not eat, drink or smoke during use. Handle in accordance with good industrial hygiene and safety procedures.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Colourless.
Odour	:	Alcohol-like.
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data avaliable
Flash point	:	> 30 °C (> 86 °F)
Auto-ignition temperature	:	Product is not self igniting Ignition temperature 425 °C (> 797 °F)
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Not applicable
Vapour pressure	:	59 hPa (44 mm Hg) at 20 °C
Relative vapour density at 20 °C	:	No data available
Relative density	:	≈ 1 (Water = 1)
Solubility	:	Water: Miscible
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	Not explosive. However formation of explosive vapour mixtures are possible

Oxidising properties	:	No data available
Explosive limits	:	Upper limit: 15.0 Vol % Lower limit: 2.0 Vol %

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Extremely high or low temperatures.

10.5. Incompatible materials

Acids and strong oxidizers.

10.6. Hazardous decomposition products

Product will not undergo self-decomposition. Thermal decomposition productions: Carbon monoxide and Carbon dioxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not Classified
Additional information	: May be harmful by inhalation. Material is irritating to mucous membranes and upper respiratory tract
Skin corrosion/irritation	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Serious eye damage/irritation	: H319 – Eye Irritant 2A
Additional information	: Causes serious eye irritation
Respiratory or skin sensitisation	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Additional information	: This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification. IARC: 3 – Group 3: Not classifiable as to its carcinogenicity to humans (2-Propanol) IARC – Component of this product are not present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen (ethanol)
Reproductive toxicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: Not classified
Additional information	: May cause drowsiness or dizziness
Specific target organ toxicity (repeated exposure)	: Not classified
Additional information	: Based on available data, the classification criteria are not met

Aspiration hazard	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Potential adverse human health effects and symptoms	: Not expected to present a significant hazard under anticipated conditions of normal use.

SECTION 12: Ecological information

12.1. Toxicity

Ecology – water	: Not classified.
Additional information	: Water hazard class 1 (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

Fecal DNA Wash Buffer	
Ecology - soil	Miscible with water.

12.5. Results of PBT and vPvB assessment

Fecal DNA Wash Buffer
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

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

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

14.1. UN number

UN-No. (ADR)	: UN1993
UN-No. (IMDG)	: UN1993
UN-No. (IATA)	: UN1993
UN-No. (ADN)	: UN1993
UN-No. (RID)	: UN1993

14.2. UN proper shipping name

Proper Shipping Name	: Isopropanol, Ethanol
Proper Shipping Name (IMDG)	: FLAMMABLE LIQUID, N.O.S. ISOPROPANOL (ISOPROPYL ALCOHOL), ETHANOL (ETHYL ALCOHOL)
Proper Shipping Name (IATA)	: FLAMMABLE LIQUID, N.O.S. ISOPROPANOL (ISOPROPYL ALCOHOL), ETHANOL (ETHYL ALCOHOL)
Proper Shipping Name (ADN)	: FLAMMABLE LIQUID, N.O.S. ISOPROPANOL (ISOPROPYL ALCOHOL), ETHANOL (ETHYL ALCOHOL)
Proper Shipping Name (RID)	: FLAMMABLE LIQUID, N.O.S. ISOPROPANOL (ISOPROPYL ALCOHOL), ETHANOL (ETHYL ALCOHOL)

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 3 Flammable Liquids

IMDG

Transport hazard class(es) (IMDG) : 3 Flammable Liquids

IATA

Transport hazard class(es) (IATA) : 3 Flammable Liquids

ADN

Transport hazard class(es) (ADN) : 3 Flammable Liquids

RID

Transport hazard class(es) (RID) : 3 Flammable Liquids

14.4. Packing group

Packing group	: III
Packing group (IMDG)	: III
Packing group (IATA)	: III
Packing group (ADN)	: III
Packing group (RID)	: III

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

Danger code (Kemler) : 30

Transport by sea

IMDG Limited Quantities (LQ) : 5 L

IMDG Excepted Quantities (EQ) : Code E1
: Maximum net quantity per inner packaging: 30 ml
: Maximum net quantity per outer packaging: 1000 ml

Stowage Category : A

EMS Number : F-E, S-E

Air transport

DOT Quantity Limitations : On passenger aircraft/rail: 60 L
On cargo aircraft only: 220 L

Inland waterway transport

Not applicable

Rail transport

DOT Quantity Limitations : On passenger aircraft/rail: 60 L

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

Abbreviations and acronyms:

	ADR (Accord Europeen relatif au transport international des marchandises Dangereuses par Route)
	ATE Acute Toxicity Estimate
	CAS (Chemical Abstracts Service) Number
	CLP (Classification, Labelling and Packaging)
	DNEL (Derived No Effect Limit)
	EC (European Community)
	EC50 (Effective Concentration 50 %)
	EN (European Norm)
	IARC (International Agency for Research on Cancer
	IATA (International Air Transport Association)
	IBC (Intermediate Bulk Container)
	IMDG (International Maritime Dangerous Goods Code)
	IMO (International Maritime Organisation)
	LC50 (Lethal Concentration 50 %)
	LD50 (Lethal Dose 50 %)
	MAC (Maximum Allowed Concentration)
	O/W (Oil in Water (chemistry))
	OECD (Organsation for Economic Co-operation and Development)
	PBT (Persistent, Bioaccumulative and Toxic)
	PMcc (Pensky-Martens Closed Cup test)
	PNEC (Predicted No Effect Concentration)
	REACH (Registration, Evaluation and Authorisation of CHemicals)
	RID (Règlement concernant le transport international ferroviaire de marchandises)
	STEL (Short Term Exposure Limit)
	TWA (Time Weighted Average)
	UNxxxx (Number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods)
	vPvB (very Persistent and very Bioaccumulative)

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

NCEC SDS EU BlackandWhite

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

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

1.1. Product identifier

Product form : Mixture

Product name : Fecal DNA Wash Buffer

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial use
Professional use

Use of the substance/mixture : Laboratory use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Bioline (Aust) Pty Ltd
Suite 111, National Innovation Centre Building Australian Technology Park, Eveleigh, NSW 2015 Australia

P: +61 (0)2 9209 4180
F: +61 (0)2 9209 4763
E-mail: tech@bioline.com

1.4. Emergency telephone number

Emergency number : +61 2 8014 4558 (Australia)
(24 hours, 7 days)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Eye Irritant Category 2A, H319
Flammable Liquid Category 2, H225
STOT SE Category 3, H336

Full text of hazard classes and 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] Extra labelling to display. Extra classification(s) to display.

Hazard pictograms (CLP) :

Signal word (CLP) : Warning
Hazardous ingredients : Ethanol; Propan-2-ol

Hazardous Statements (CLP) : H319 – Causes serious eye irritation
H225 – Flammable liquid and vapor
H336 – May cause drowsiness or dizziness

Precautionary Statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P280 – Wear eye protection, protective gloves, protective clothing
P305 + P351 + P388 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing
P310 – Immediately call a doctor.

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ethanol	(CAS No) 64-17-5 (EC No.) 200-578-6	< 25	Flam. Liq. 2, H225 Eye Irrit. 2, H319
Propan-2-ol	(CAS No) 67-63-0 (EC No.) 200-661-7	< 25	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3 (Inhalation), H336

Full text of H-statements: see section 16

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 to fresh air, keep the patient warm and at rest. If symptoms persist, obtain medical attention.

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 symptoms develop, obtain medical attention.

First-aid measures after eye contact : Rinse immediately with plenty of water. Ensure that folded skin of eyelids is thoroughly washed with water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth. Give 100 - 200 ml of water to drink. If symptoms develop, obtain medical attention.

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

Symptoms/injuries : Inhalation of vapors, mists or sprays can cause drowsiness, dizziness, and other central nervous system effects.

Symptoms/injuries after eye contact : May cause serious irritation to eyes.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Not flammable.

Hazardous decomposition products in case of fire : Carbon monoxide and Carbon dioxide.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Avoid fire-fighting water entering the environment.

Protection during firefighting : As in any fire, wear self-contained breathing apparatus and full protective gear.

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. Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing and gloves.

Emergency procedures : Avoid contact with eyes, skin and clothing.

6.2. Environmental precautions

Notify authorities if large amounts of the product enters sewers or public waters. Dilute with plenty of water

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Absorb with non-combustible material (sand or similar) and transfer to containers for later disposal.
Ensure adequate ventilation

6.4. Reference to other sections

SECTION 8: Exposure controls/personal protection.

SECTION 13: Disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide adequate ventilation. Avoid contact with skin, eyes and clothing. Prevent formation of Aerosols. Keep ignition sources away. Protect against electrostatic charges.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Take off contaminated clothing and wash before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool well ventilated place. Keep container closed when not in use.

Incompatible materials : Acids and strong oxidizers.

7.3. Specific end use(s)

Laboratory use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

Ethanol (64-17-5)		
United Kingdom	Local name	Ethanol
United Kingdom	EH40 WEL TWA (mg/m³)	1920 mg/m³
Australia	Local name	Ethanol
Australia	TWA (mg/m³)	1880 mg/m³

Propan-2-ol (67-63-0)		
United Kingdom	Local name	Propan-2-ol
United Kingdom	EH40 WEL TWA (mg/m³)	999 mg/m³
United Kingdom	EH40 WEL STEL (mg/m³)	1250 mg/m³
Australia	Local name	Propan-2-ol
Australia	TWA (mg/m³)	983 mg/m³
Australia	STEL (mg/m³)	1230 mg/m³

Propan-2-ol (67-63-0)	
BEI	40 mg/L
Medium	Urine
Time	End of shift at end of work week
Parameter	Acetone (background, non-specific)

8.2. Exposure controls

Appropriate engineering controls:

Provide adequate ventilation.

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves. Standard EN 374 - Protective gloves against chemicals. The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed. Gloves should be removed and replaced if there are any signs of degradation or breakthrough

Eye protection:

Wear safety glasses with side shields. Standard EN 166 - Personal eye-protection

Skin and body protection:

Long sleeved protective clothing

Respiratory protection:

Not required for normal conditions of use

Thermal hazard protection:

Not required for normal conditions of use.

Other information:

Do not eat, drink or smoke during use. Handle in accordance with good industrial hygiene and safety procedures.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Colourless.
Odour	:	Alcohol-like.
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data avaliable
Flash point	:	> 30 °C (> 86 °F)
Auto-ignition temperature	:	Product is not self igniting Ignition temperature 425 °C (> 797 °F)
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Not applicable
Vapour pressure	:	59 hPa (44 mm Hg) at 20 °C
Relative vapour density at 20 °C	:	No data available
Relative density	:	≈ 1 (Water = 1)
Solubility	:	Water: Miscible
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	Not explosive. However formation of explosive vapour mixtures are possible

Oxidising properties	:	No data available
Explosive limits	:	Upper limit: 15.0 Vol % Lower limit: 2.0 Vol %

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
Stable under normal conditions.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
None known.

10.4. Conditions to avoid
Extremely high or low temperatures.

10.5. Incompatible materials
Acids and strong oxidizers.

10.6. Hazardous decomposition products
Product will not undergo self-decomposition. Thermal decomposition productions: Carbon monoxide and Carbon dioxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not Classified
Additional information	: May be harmful by inhalation. Material is irritating to mucous membranes and upper respiratory tract
Skin corrosion/irritation	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Serious eye damage/irritation	: H319 – Eye Irritant 2A
Additional information	: Causes serious eye irritation
Respiratory or skin sensitisation	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Additional information	: This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification. IARC: 3 – Group 3: Not classifiable as to its carcinogenicity to humans (2-Propanol) IARC – Component of this product are not present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen (ethanol)
Reproductive toxicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure)	: Not classified
Additional information	: May cause drowsiness or dizziness
Specific target organ toxicity (repeated exposure)	: Not classified
Additional information	: Based on available data, the classification criteria are not met

Aspiration hazard	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Potential adverse human health effects and symptoms	: Not expected to present a significant hazard under anticipated conditions of normal use.

SECTION 12: Ecological information

12.1. Toxicity

Ecology – water	: Not classified.
Additional information	: Water hazard class 1 (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

Fecal DNA Wash Buffer	
Ecology - soil	Miscible with water.

12.5. Results of PBT and vPvB assessment

Fecal DNA Wash Buffer
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

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

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

14.1. UN number

UN-No. (ADR)	: UN1993
UN-No. (IMDG)	: UN1993
UN-No. (IATA)	: UN1993
UN-No. (ADN)	: UN1993
UN-No. (RID)	: UN1993

14.2. UN proper shipping name

Proper Shipping Name	: Isopropanol, Ethanol
Proper Shipping Name (IMDG)	: FLAMMABLE LIQUID, N.O.S. ISOPROPANOL (ISOPROPYL ALCOHOL), ETHANOL (ETHYL ALCOHOL)
Proper Shipping Name (IATA)	: FLAMMABLE LIQUID, N.O.S. ISOPROPANOL (ISOPROPYL ALCOHOL), ETHANOL (ETHYL ALCOHOL)
Proper Shipping Name (ADN)	: FLAMMABLE LIQUID, N.O.S. ISOPROPANOL (ISOPROPYL ALCOHOL), ETHANOL (ETHYL ALCOHOL)
Proper Shipping Name (RID)	: FLAMMABLE LIQUID, N.O.S. ISOPROPANOL (ISOPROPYL ALCOHOL), ETHANOL (ETHYL ALCOHOL)

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 3 Flammable Liquids

IMDG

Transport hazard class(es) (IMDG) : 3 Flammable Liquids

IATA

Transport hazard class(es) (IATA) : 3 Flammable Liquids

ADN

Transport hazard class(es) (ADN) : 3 Flammable Liquids

RID

Transport hazard class(es) (RID) : 3 Flammable Liquids

14.4. Packing group

Packing group	: III
Packing group (IMDG)	: III
Packing group (IATA)	: III
Packing group (ADN)	: III
Packing group (RID)	: III

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

Danger code (Kemler) : 30

Transport by sea

IMDG Limited Quantities (LQ) : 5 L

IMDG Excepted Quantities (EQ) : Code E1
: Maximum net quantity per inner packaging: 30 ml
: Maximum net quantity per outer packaging: 1000 ml

Stowage Category : A

EMS Number : F-E, S-E

Air transport

DOT Quantity Limitations : On passenger aircraft/rail: 60 L
On cargo aircraft only: 220 L

Inland waterway transport

Not applicable

Rail transport

DOT Quantity Limitations : On passenger aircraft/rail: 60 L

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

Abbreviations and acronyms:

	ADR (Accord Europeen relatif au transport international des marchandises Dangereuses par Route)
	ATE Acute Toxicity Estimate
	CAS (Chemical Abstracts Service) Number
	CLP (Classification, Labelling and Packaging)
	DNEL (Derived No Effect Limit)
	EC (European Community)
	EC50 (Effective Concentration 50 %)
	EN (European Norm)
	IARC (International Agency for Research on Cancer
	IATA (International Air Transport Association)
	IBC (Intermediate Bulk Container)
	IMDG (International Maritime Dangerous Goods Code)
	IMO (International Maritime Organisation)
	LC50 (Lethal Concentration 50 %)
	LD50 (Lethal Dose 50 %)
	MAC (Maximum Allowed Concentration)
	O/W (Oil in Water (chemistry))
	OECD (Organsation for Economic Co-operation and Development)
	PBT (Persistent, Bioaccumulative and Toxic)
	PMcc (Pensky-Martens Closed Cup test)
	PNEC (Predicted No Effect Concentration)
	REACH (Registration, Evaluation and Authorisation of CHemicals)
	RID (Règlement concernant le transport international ferroviaire de marchandises)
	STEL (Short Term Exposure Limit)
	TWA (Time Weighted Average)
	UNxxxx (Number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods)
	vPvB (very Persistent and very Bioaccumulative)

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

NCEC SDS EU BlackandWhite

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