Safety Data Sheet

BIO-52082

ISOLATE II Fecal DNA Kit

Lysis Buffer

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Date of original issue: 11/11/2019 Current revision: 10/07/2020 Version 1.1 Supersedes: 11/11/2019 Version 1.0

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

1.1 Product identifier

Product form:	Mixture
Product name:	Lysis Buffer
CAS No.:	N/A
EC No.:	N/A
REACH No.:	A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

Relevant identified uses:	Product for analytical use
Uses advised against:	Not described

1.3 Details of the supplier of the safety data sheet

Bioline Reagents Ltd, part of Meridian Bioscience

Humber Road
London
NW2 6EW
United Kingdom

Phone: +44 (0)20 8830 5300
Fax: +44 (0)20 8452 2822
E-mail: mbi.tech@meridianlifescience.com

1.4 Emergency telephone number

Emergency number:	+44 (0)1865 407 333 – English speaking (24 hours, 7 days)
Contact:	CareChem 24

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Lysis Buffer

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Inhalation (Category 5), H333
Specific target organ toxicity - repeated exposure, Respiratory Tract (Category 2), H373

2.2 Label elements

According to CLP (GHS) inner packages must be only labelled with symbol(s) and product identificator (EU 1272/2008 Annex I - 1.5.1.2).

Harmful chemicals/mixtures with signal word: WARNING must not be labelled with H and P phrases until 125 mL (EU 1272/2008 Annex I - 1.5.2).

Lysis Buffer

Labelling according Regulation (EC) No 1272/2008

GHS Pictogram:

Signal word: Warning

Hazard Statements (CLP)	Precautionary Statements (CLP)
H333 – May be harmful if inhaled. H373 - May cause damage to organs (Respiratory Tract) through prolonged or repeated exposure if inhaled.	P304, P340 & P312 – IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. P314 – Get medical advice/ attention if you feel unwell.

2.3 Other hazards

Possible hazards from physicochemical properties:

Some hazards associated with individual components of this mixture are not relevant because the substances are present in concentrations below the GHS cut-off levels, change of physical state or because the mixture/ solution is buffered to pH 4-9 (see GHS Directive 1272/2008/EC Annex I, chapter 3.2.3.1.2.).

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1/3.2 Substance or Mixture

Lysis Buffer

Name, synonyms and formulae	Product Identifier	Composition	Classification according to Regulation (EC) No. 1272/2008 (CLP)
Ethylenediaminetetraacetic acid disodium salt dihydrate, Edetate disodium dihydrate $C_{10}H_{14}N_2Na_2O_8 \cdot 2H_2O$	(CAS No.) 39450-01-6 (EC No.) 254-457-8	≤20%	Acute Tox. 4; STOT RE 2; H332, H373

3.3 Remarks

List of H, EUR and P phrases: see section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aid measures general	If necessary consult a physician. Show this safety data sheet to the medical professional in attendance.
First-aid measures after inhalation	Remove to fresh air, keep the patient warm and provide resuscitation if necessary. If symptoms develop, obtain medical attention.
First-aid measures after skin contact	Remove contaminated clothing. Rinse the affected skin or mucous membrane thoroughly under running water. (If possible) use soap.
First-aid measures after eye contact	After contact with the eyes rinse thoroughly with plenty of water for at least 15 minutes with the eyelid wide open.
First-aid measures after ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth and drink plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling section 2.2 and/or in section 11

Not expected to present a significant hazard under anticipated conditions of normal use.

4.3 Indication of any immediate medical attention and special treatment needed

No additional recommendations.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area.

Suitable extinguishing media	All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used.
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 oxides, Nitrogen oxides, Sodium oxides.

5.3 Advice for firefighters

Firefighting instructions	Product package burns like paper or plastic. Spray any vapours released with water. Retain fire water where possible.
Protection during firefighting	Protective breathing apparatus, independent of the ambient air (isolated equipment), and sealed protective clothing is necessary in the event of large-scale formation of toxic substances.

5.4 Additional Information

None.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Evacuate unnecessary personnel. Avoid breathing vapours, mist or gas. Avoid contact with skin, eyes and clothing. Regular staff training is necessary, indicating hazards and precautions on the basis of operating instructions. Restrictions on activity must be observed.
For emergency responders	Wear suitable protective equipment as defined in section 8.2 Prevent further leakage or spillage if safe to do so. Avoid release of materials into the environment.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and material for containment and cleaning up

Small Scale release	Make use of general chemical spill kit or other absorbent material. Clean any contaminated equipment and floors with plenty of water. Collect small amounts of leaked liquid and dispose via appropriate chemical waste stream.
Large Scale release	Bind any escaping liquid with inert absorbent material (sand, vermiculite or similar). Block/ prevent liquid entering any open drain. Collect contaminated materials and dispose in accordance to local regulations for the disposal of hazardous chemicals.

6.4 Reference to other sections

SECTION 5.4: Additional fire precautions.

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	Handling in accordance with the instructions supplied with the product. Provide adequate ventilation. Avoid breathing vapours, mist or gas. 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. Store in a cool well ventilated place out of direct sunlight. Keep container closed when not in use. Hygroscopic.
Incompatible materials	Store separately from: Strong oxidizing agents.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Lysis Buffer		
United Kingdom	WEL TWA (mg/m³)	N/A
United Kingdom	WEL TWA (ppm)	N/A
United Kingdom	WEL STEL (mg/m³)	N/A
United Kingdom	WEL STEL (ppm)	N/A
United Kingdom	Remark (WEL)	Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls:	Good ventilation or extraction system in the room, floor resistant to chemicals and washing facilities available.
General controls	Avoid all unnecessary exposure. Handle in accordance with good industrial hygiene and safety practice.
Respiratory protection	Respiratory protection not required. For nuisance exposures or if risk assessment requires, use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Eye protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166 (EU) with integrated side shields or wrap-around protection.

Hand protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Wear protective gloves that satisfy the specifications of EU Directive 89/686/EEC and the standard EN374 derived from it. Exact breakthrough times to be found through the manufacturer of the protective gloves and must be observed. Gloves should be removed and replaced if there are any signs of degradation or breakthrough. If used in solution, or mixed with other substances, and under conditions which differ from EN374, contact the supplier of the CE approved gloves.
Skin and body protection	Long sleeved protective clothing.
Thermal protection	Not required for normal conditions of use.
Other information	Eating, drinking, smoking, taking snuff and storage of food in work areas and at outdoor workplaces is prohibited. Avoid contact with the skin, eyes and clothing. Rinse any clothing on which the substance has been spilled, and soak it in water. Wash hands thoroughly with soap and water when stopping work and before eating.

These recommendations are advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Lysis Buffer	
Physical state:	Liquid
Colour:	Colourless
Molecular Mass:	No data available
Odour:	Mild
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 available
Flash point:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Flammability (solid, gas):	No data available
Vapour pressure:	No data available
Relative vapour density at 20 °C:	No data available
Relative density:	No data available
Solubility:	Fully miscible.

Log Pow:	No data available
Viscosity, kinematic:	No data available
Viscosity, dynamic:	No data available
Oxidising properties:	No data available
Explosive properties:	No data available
Explosive limits:	No data available

9.2 Other information

Data for the other parameters of the mixtures are not available, because no registration and no chemical safety report is required.

Relevant Properties of Substance Group: None

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under normal conditions.

10.2 Chemical stability

Stable under recommended 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

Hazardous decomposition products formed under fire conditions - Carbon oxides, Nitrogen oxides, Sodium oxides.

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Edetate disodium dihydrate	
LD50 oral rat (OECD Test Guideline 401)	2800 mg/kg
RTECS:	AH4410000

Quantitative data on the toxicity of this product is not available.

Lysis Buffer	
Acute toxicity	Inhalation Category 5
Additional information	Based on the concentration of Edetate disodium dihydrate in the solution.
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.
Additional information	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 (repeat exposure)	Respiratory Tract Category 2
Additional information	Based on the concentration of Edetate disodium dihydrate in the solution.
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

Edetate disodium dihydrate	
Ecology - Water	Not Classified
LC50 – Poecilia reticulata (guppy) 96 h	320 mg/l

Environmental hazards must not be labelled with P phrases until 125 mL or 125 g (EU 1272/2008 Annex I - 1.5.2).

12.2 Persistence and degradability

Edetate disodium dihydrate	
Biodegradation	No data available

12.3 Bioaccumulative potential

Edetate disodium dihydrate	
Bioconcentration factor (BCF REACH)	No additional information available
Log Pow	No data available

12.4 Mobility in soil

Edetate disodium dihydrate	
Ecology - Soil	No data available

12.5 Results of PBT and vPvB assessment

Edetate disodium dihydrate
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

Edetate disodium dihydrate
No additional information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste disposal recommendations:	**Product** Offer surplus and non-recyclable solutions to a licensed disposal company. **Contaminated packaging** Dispose of as unused product.

SECTION 14: Transport information

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

14.1 UN number

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

14.2 UN proper shipping name

Proper Shipping Name	Not regulated
Proper Shipping Name (IMDG)	Not regulated
Proper Shipping Name (IATA)	Not regulated
Proper Shipping Name (ADN)	Not regulated
Proper Shipping Name (RID)	Not regulated

14.3 Transport hazard class(es)

Transport hazard class(es) (ADR)	Not regulated
Transport hazard class(es) (IMDG)	Not regulated
Transport hazard class(es) (IATA)	Not regulated
Transport hazard class(es) (ADN)	Not regulated
Transport hazard class(es) (RID)	Not regulated

14.4 Packing group

Packing group	Not regulated
Packing group (IMDG)	Not regulated
Packing group (IATA)	Not regulated
Packing group (ADN)	Not regulated
Packing group (RID)	Not regulated

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 regulated
Transport by sea	Not regulated
Air transport	Not regulated
Inland waterway transport	Not regulated
Rail transport	Not regulated

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

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list ≥ 0,1 % / SCL

Contains no REACH Annex XIV substances

15.2 Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other Information

16.1 Full text of H, EUH and P statements

H333	May be harmful if inhaled.
H373	May cause damage to organs (Respiratory Tract) through prolonged or repeated exposure if inhaled.
P304, P340 & P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
P314	Get medical advice/ attention if you feel unwell.

16.2 Training Advice

Regular safety training

16.3 Abbreviations and acronyms

ADR	Accord européen relatif au transport international des marchandises Dangereuses par Route
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service number
CLP	Classification, Labeling 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	Maximal Allowed Concentration
O/W	Oil-in-Water (chemistry)
OECD	Organisation 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

16.4 Recommended Restriction on Use

Only for professional user working under controlled conditions.

Look about employee restrictions for young people (e.g. 94/33/EC)

Look about employee restrictions for pregnant women and nursing women (e.g. 92/85/EEC)

16.5 Further Information

Bioline Reagents Ltd, part of Meridian Bioscience, provides the information contained herein in good faith being up-to-date of own realizations at revision time. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgement in determining its appropriateness for a particular purpose.

Bioline Reagents Ltd, part of Meridian Bioscience, makes NO REPRESENTATIONS or WARRANTIES, either expressed or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers.

Accordingly, **Bioline Reagents Ltd**, Meridian Bioscience or other subsidiaries, will not be responsible for damages resulting from use of or reliance upon this information. See terms and conditions at the end of our price lists for additional information.

16.6 Sources of Key Data

UK – Control of Substances Hazardous to Health Regulations 2002 (as amended). Health and Safety at Work etc. Act 1974 (as amended). Guidance Workplace Exposure Limits EH40.

EU – 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. Regulation 453/2010/EU REACH - REQUIREMENTS FOR THE COMPILATION OF SAFETY DATA SHEETS Regulation 487/2013/EU, 4th adaptation of CLP regulation to technical and scientific progress. Legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015.

German act governing protection from hazardous substances (Chemicals Act / Chemikaliengesetz- ChemG), revised on August 2013 German order governing protection from hazardous substances (Ordinance on Hazardous Substances / Gefahrstoffverordnung - GefStoffV), revised on November 2010, according to Directive 98/24/EC
TRGS 900, German engineering rules governing limits in air at work, updated February 2015 SUVA .CH, Limits in air at work 2009, revised on 01.2009. KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)., updated October 2011

Republic of China – 职业病防治法

USA – Occupational Safety and Health Administration (OSHA) Occupational Exposure Limits - Table Z-1 Limits for Air Contaminants. The American Conference of Governmental Industrial Hygienists (ACGIH).

Australia - Work Health and Safety (WHS) Act and the WHS Regulations.

DNA Pre-Wash Buffer

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Date of original issue: 12/11/2019 Current revision: 30/06/2020 Version 1.1 Supersedes: 12/11/2019 Version 1.0

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
CAS No.:	N/A
EC No.:	N/A
REACH No.:	A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

Relevant identified uses:	Product for analytical use
Uses advised against:	Not described

1.3 Details of the supplier of the safety data sheet

Bioline Reagents Ltd, part of Meridian Bioscience
Humber Road
London
NW2 6EW
United Kingdom

Phone: +44 (0)20 8830 5300
Fax: +44 (0)20 8452 2822
E-mail: mbi.tech@meridianlifescience.com

1.4 Emergency telephone number

Emergency number:	+44 (0)1865 407 333 – English speaking (24 hours, 7 days)
Contact:	CareChem 24

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

DNA Pre-Wash Buffer

Classification according to Regulation (EC) No 1272/2008

Flammable liquids (Category 2), H225
Skin irritation (Category 2), H315
Eye irritation (Category 2), H319
Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 4), H332
Specific target organ toxicity - Single exposure central nervous system (Category 3), H336

2.2 Label elements

According **CLP (GHS)** inner packages must be only labelled with symbol(s) and product identificator (EU 1272/2008 Annex I - 1.5.1.2).

Harmful chemicals/mixtures with signal word: **WARNING** must not be labelled with H and P phrases **until 125 mL** or **125 g** (EU 1272/2008 Annex I - 1.5.2).

DNA Pre-Wash Buffer

Labelling according Regulation (EC) No 1272/2008

GHS Pictogram 

Signal word: Warning

Hazard Statements (CLP)	Precautionary Statements (CLP)
H225 – Highly flammable liquid and vapour. H302 & H332 – Harmful if swallowed or if inhaled H315 – Causes skin irritation. H319 – Causes serious eye irritation. H336 – May cause drowsiness or dizziness.	P210 – Keep away from heat/sparks/open flames/ hot surfaces. – No smoking. P261 – Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. P301, P312 & P330 – IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. P305, P351 & P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3 Other hazards

Possible hazards from physicochemical properties:

Flammable properties. Vapour forms explosive mixtures with air.

Some hazards associated with individual components of this mixture are not relevant because the substances are present in concentrations below the GHS cut-off levels, change of physical state or because the mixture/ solution is buffered to pH 4-9 (see GHS Directive 1272/2008/EC Annex I, chapter 3.2.3.1.2.).

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1/3.2 Substance or Mixture

DNA Pre-Wash Buffer

Name, synonyms and formulae	Product Identifier	Composition	Classification according to Regulation (EC) No. 1272/2008 (CLP)
Guanidine hydrochloride, Aminoformamidine hydrochloride, Aminomethanamidine hydrochloride $CH_5N_3 \cdot HCl$	(CAS No.) 50-01-1 (EC No.) 200-002-3	≤50%	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; H302, H332, H315, H319
Propan-2-ol, 2-propanol, isopropanol, IPA, C_3H_8O	(CAS No.) 67-63-0 (EC No.) 200-661-7	≤50%	Flam. Liq. 2; Eye Irrit. 2; STOT SE 3; H225, H319, H336

3.3 Remarks

List of H, EUR and P phrases: see section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aid measures general	If necessary consult a physician. Show this safety data sheet to the medical professional in attendance.
First-aid measures after inhalation	Remove to fresh air, keep the patient warm and provide resuscitation if necessary. If symptoms develop, obtain medical attention.
First-aid measures after skin contact	Remove contaminated clothing. Rinse the affected skin or mucous membrane thoroughly under running water. (If possible) use soap.
First-aid measures after eye contact	After contact with the eyes rinse thoroughly with plenty of water for at least 15 minutes with the eyelid wide open.
First-aid measures after ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth and drink plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling section 2.2 and/or in section 11

May cause serious irritation on contact with eyes and toxic effects if swallowed or inhaled.

4.3 Indication of any immediate medical attention and special treatment needed

No additional recommendations.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area.

Suitable extinguishing media	All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used.
Unsuitable extinguishing media	None known.

5.2 Special hazards arising from the substance or mixture

Fire Hazard	Flammable. May form explosive vapour-air mixtures.
Hazardous decomposition products in case of fire	Carbon oxides, Nitrogen oxides, Hydrogen chloride gas.

5.3 Advice for firefighters

Firefighting instructions	Product package burns like paper or plastic. Spray any vapours released with water. Retain fire water where possible.
Protection during firefighting	Formation of hazardous and caustic vapour-air mixtures possible. Protective breathing apparatus, independent of the ambient air (isolated equipment), and sealed protective clothing is necessary in the event of large-scale formation of toxic substances.

5.4 Additional Information

None.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Avoid sources of ignition. Evacuate unnecessary personnel. Avoid breathing vapours, mist or gas. Avoid contact with skin, eyes and clothing. Regular staff training is necessary, indicating hazards and precautions on the basis of operating instructions. Restrictions on activity must be observed.
For emergency responders	Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Wear suitable protective equipment as defined in section 8.2 Prevent further leakage or spillage if safe to do so. Avoid release of materials into the environment.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so.

Do not let product enter drains.

6.3 Methods and material for containment and cleaning up

Small Scale release	Remove sources of ignition. Make use of general chemical spill kit or other absorbent material. Clean any contaminated equipment and floors with plenty of water. Collect contaminated materials and dispose in accordance to local regulations for the disposal of hazardous chemicals.
Large Scale release	Remove sources of ignition. Bind any escaping liquid with inert absorbent material (sand, vermiculite or similar). Block/ prevent liquid entering any open drain. Only use intrinsically safe equipment during clean up. Collect contaminated materials and dispose in accordance to local regulations for the disposal of hazardous chemicals.

6.4 Reference to other sections

SECTION 5.4: Additional fire precautions.

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	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Take precautionary measures against static discharge. Handling in accordance with the instructions supplied with the product. Provide adequate ventilation. Avoid breathing vapours, mist or gas. 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. Store in a cool well ventilated place out of direct sunlight and away from ignition sources. Keep container closed when not in use. Hygroscopic.
Incompatible materials	Store separately from: Oxidizing agents, Acid anhydrides, Aluminium, Halogenated compounds, Acids.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Guanidine hydrochloride		
United Kingdom	WEL TWA (mg/m³)	N/A
United Kingdom	WEL TWA (ppm)	N/A
United Kingdom	WEL STEL (mg/m³)	N/A
United Kingdom	WEL STEL (ppm)	N/A
United Kingdom	Remark (WEL)	Contains no substances with occupational exposure limit values.
Propan-2-ol		
United Kingdom	WEL TWA (mg/m³)	999 mg/m^3
United Kingdom	WEL TWA (ppm)	400 ppm
United Kingdom	WEL STEL (mg/m³)	1,250 mg/m^3
United Kingdom	WEL STEL (ppm)	500 ppm
United Kingdom	Remark (WEL)	N/A

8.2 Exposure controls

Appropriate engineering controls:	Good ventilation or extraction system in the room, floor resistant to chemicals and washing facilities available.
General controls	Avoid all unnecessary exposure. Handle in accordance with good industrial hygiene and safety practice.
Respiratory protection	Respiratory protection not normally required. For nuisance exposures or if risk assessment requires use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Eye protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166 (EU) with integrated side shields or wrap-around protection.
Hand protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Wear protective gloves that satisfy the specifications of EU Directive 89/686/EEC and the standard EN374 derived from it. Exact breakthrough times to be found through the manufacturer of the protective gloves and must be observed. Gloves should be removed and replaced if there are any signs of degradation or breakthrough. If used in solution, or mixed with other substances, and under conditions which differ from EN374, contact the supplier of the CE approved gloves.
Skin and body protection	Long sleeved protective clothing.

Thermal protection	Not required for normal conditions of use.
Other information	Eating, drinking, smoking, taking snuff and storage of food in work areas and at outdoor workplaces is prohibited. Avoid contact with the skin, eyes and clothing. Rinse any clothing on which the substance has been spilled, and soak it in water. Wash hands thoroughly with soap and water when stopping work and before eating.

These recommendations are advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

DNA Pre-Wash Buffer	
Physical state:	Liquid
Colour:	Colourless
Molecular Mass:	No data available
Odour:	Alcoholic
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
Flash point:	13 °C
Auto-ignition temperature:	425 °C
Decomposition temperature:	No data available
Flammability (solid, gas):	Not applicable
Vapour pressure at 20 °C:	43 hPa (32 mm Hg)
Relative vapour density at 20 °C:	No data available
Relative density:	1.06 g/cm³ (Water = 1)
Solubility:	Water: Fully Miscible
Log Pow:	No data available
Viscosity, kinematic:	No data available
Viscosity, dynamic:	No data available
Oxidising properties:	No data available
Explosive properties:	Product is not explosive. However, formation of explosive air/ vapor mixtures are possible.
Explosive limits:	LEL 2.0% v/v UEL 12.0% v/v

9.2 Other information

Data for the other parameters of the mixtures are not available, because no registration and no chemical safety report is required.

Relevant Properties of Substance Group: None

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under normal conditions.

10.2 Chemical stability

Stable under recommended conditions.

10.3 Possibility of hazardous reactions

None known.

10.4 Conditions to avoid

Extremes of temperature and direct sunlight.

Heat, flames and sparks.

10.5 Incompatible materials

Oxidizing agents, Acid anhydrides, Aluminium, Halogenated compounds, Acids.

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions – Carbon oxides, Nitrogen oxides, Hydrogen chloride gas.

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Guanidine hydrochloride	
LD50 Oral - Rat	475 mg/kg
LD50 Oral - Mouse	571 mg/kg
LC50 Inhalation - Rat - female - 4hr (OECD Test Guideline 403)	3.181 mg/l
TSCA Inventory:	Listed
California Proposition 65 List:	Not listed
Australia NICNAS:	Not listed
Canada CEPA 1999:DSL:	Yes
Japan CSCL/PRTR:	Not listed
Japan PDSCL:	Not listed
Japan ISHL:	Not listed
South Korea TCCA:	Not listed
Korea Exist.Chem.Inventory:	KE-18111
RTECS:	MF4300000
Propan-2-ol	
LD50 oral rat	5,045.0 mg/kg
LC50 Inhalation rat – 8hr	16000 ppm
LD50 Dermal rabbit	12,800 mg/kg
TSCA Inventory:	Listed
California Proposition 65 List:	Not listed
Australia NICNAS:	Not listed
Canada CEPA 1999:DSL:	Yes

Japan CSCL/PRTR:	PAC Yes
Japan PDSCL:	Not listed
Japan ISHL:	Listed ≥ 1.0%/ ≥ 0.1% Article 57-2 (SDS Required)
South Korea TCCA:	Not listed
Korea Exist.Chem.Inventory:	KE-29363
RTECS:	NT8050000

Quantitative data on the toxicity of this product is not available.

DNA Pre-Wash Buffer	
Acute toxicity	Oral and Inhalation Category 4
Additional information	Based on the concentration of Guanidine hydrochloride in mixture.
Skin corrosion/irritation	Skin irritation Category 2
Additional information	Based on the concentration of Guanidine hydrochloride in mixture.
Serious eye damage/irritation	Serious eye irritation Category 2
Additional information	Based on the concentration of Guanidine hydrochloride and Propan-2-ol in mixture.
Respiratory or skin sensitisation	Not classified.
Additional information	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Not classified.
Additional information	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)	Single exposure central nervous system Category 3
Additional information	Based on the concentration of Propan-2-ol in mixture.
Aspiration hazard	May cause drowsiness or dizziness if inhaled.
Additional information	Based on the concentration of Propan-2-ol in mixture.
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

Guanidine hydrochloride	
Ecology - Water	No additional information available
LC50 - Leuciscus idus (Golden orfe)	1,759 mg/l
Propan-2-ol	
Ecology - Water	No additional information available
LC50 – Pimephales promelas (fathead minnow) 96hr	9,640 mg/l
EC50 – Daphnia magna (water flea) 24hr	5,102 mg/l
Immobilization EC50 Daphnia magna (water flea) 24hr	6,851 mg/l
EC50 – Desmodesmus subspicatus (green algae) 72hr	2,000 mg/l
EC50 – Algae 24hr	> 1,000 mg/l

Environmental hazards must not be labelled with P phrases until 125 mL or 125 g (EU 1272/2008 Annex I - 1.5.2).

12.2 Persistence and degradability

Guanidine hydrochloride	
Biodegradation	No data available.
Propan-2-ol	
Biodegradation	No data available.

12.3 Bioaccumulative potential

Guanidine hydrochloride	
Bioconcentration factor (BCF REACH)	No additional information available.
Log Pow	No data available.
Propan-2-ol	
Bioconcentration factor (BCF REACH)	No additional information available.
Log Pow	≤ 4

12.4 Mobility in soil

Guanidine hydrochloride	
Ecology - Soil	No data available.
Propan-2-ol	
Ecology - Soil	No data available.

12.5 Results of PBT and vPvB assessment

Guanidine hydrochloride
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
Propan-2-ol
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

Guanidine hydrochloride
No additional information available.
Propan-2-ol
No additional information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste disposal recommendations:	**Product** Offer surplus and non-recyclable solutions to a licensed disposal company. **Contaminated packaging** Dispose of as unused product.

SECTION 14: Transport information

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

14.1 UN number

UN-No. (ADR)	1219
UN-No. (IMDG)	1219
UN-No. (IATA)	1219
UN-No. (ADN)	1219
UN-No. (RID)	1219

14.2 UN proper shipping name

Proper Shipping Name	ISOPROPANOL (ISOPROPYL ALCOHOL) 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)

Transport hazard class(es) (ADR)	3 Flammable liquids
Transport hazard class(es) (IMDG)	3 Flammable liquids
Transport hazard class(es) (IATA)	3 Flammable liquids
Transport hazard class(es) (ADN)	3 Flammable liquids
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

Special precautions for user	Warning: Flammable liquids
Danger code (Kemler)	33
EMS Number	F-E, S-D
Stowage Category	B
Limited quantity	1L
Excepted quantity	E2

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

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list ≥ 0,1 % / SCL

Contains no REACH Annex XIV substances

15.2 Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other Information

16.1 Full text of H, EUH and P statements

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P301, P312 & P330	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
P305, P351 & P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

16.2 Training Advice

Regular safety training

16.3 Abbreviations and acronyms

ADR	Accord européen relatif au transport international des marchandises Dangereuses par Route
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service number
CLP	Classification, Labeling 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	Maximal Allowed Concentration
O/W	Oil-in-Water (chemistry)
OECD	Organisation 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

16.4 Recommended Restriction on Use

Only for professional user working under controlled conditions.

Consider employee restrictions for young people (e.g. 94/33/EC)

Consider employee restrictions for pregnant women and nursing women (e.g. 92/85/EEC)

16.5 Further Information

Bioline Reagents Ltd, part of Meridian Bioscience, provides the information contained herein in good faith being up-to-date of own realizations at revision time. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgement in determining its appropriateness for a particular purpose.

Bioline Reagents Ltd, part of Meridian Bioscience, makes NO REPRESENTATIONS or WARRANTIES, either expressed or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers.

Accordingly, **Bioline Reagents Ltd**, Meridian Bioscience or other subsidiaries, will not be responsible for damages resulting from use of or reliance upon this information. See terms and conditions at the end of our price lists for additional information.

16.6 Sources of Key Data

UK – Control of Substances Hazardous to Health Regulations 2002 (as amended). Health and Safety at Work etc. Act 1974 (as amended). Guidance Workplace Exposure Limits EH40.

EU – 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. Regulation 453/2010/EU REACH - REQUIREMENTS FOR THE COMPILATION OF SAFETY DATA SHEETS Regulation 487/2013/EU, 4th adaptation of CLP regulation to technical and scientific progress. Legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015.

German act governing protection from hazardous substances (Chemicals Act / Chemikaliengesetz- ChemG), revised on August 2013 German order governing protection from hazardous substances (Ordinance on Hazardous Substances / Gefahrstoffverordnung - GefStoffV), revised on November 2010, according to Directive 98/24/EC
TRGS 900, German engineering rules governing limits in air at work, updated February 2015 SUVA .CH, Limits in air at work 2009, revised on 01.2009. KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)., updated October 2011

Republic of China – 职业病防治法

USA – Occupational Safety and Health Administration (OSHA) Occupational Exposure Limits - Table Z-1 Limits for Air Contaminants. The American Conference of Governmental Industrial Hygienists (ACGIH).

Australia - Work Health and Safety (WHS) Act and the WHS Regulations.

Fecal DNA Wash Buffer

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Date of original issue: 10/04/2018 Current revision: 03/07/2020 Version 1.1 Supersedes: 10/04/2018 Version 1.0

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
CAS No.:	N/A
EC No.:	N/A
REACH No.:	A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

Relevant identified uses:	Product for analytical use
Uses advised against:	Not described

1.3 Details of the supplier of the safety data sheet

Bioline Reagents Ltd, part of Meridian Bioscience
Humber Road
London
NW2 6EW
United Kingdom

Phone: +44 (0)20 8830 5300
Fax: +44 (0)20 8452 2822
E-mail: mbi.tech@meridianlifescience.com

1.4 Emergency telephone number

Emergency number:	+44 (0)1865 407 333 – English speaking (24 hours, 7 days)
Contact:	CareChem 24

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Fecal DNA Wash Buffer

Classification according to Regulation (EC) No 1272/2008

Flammable liquid and vapour, (Category 3), H226
Causes serious eye irritation, (Category 2), H319
May cause drowsiness or dizziness, H336

2.2 Label elements

According **CLP (GHS)** inner packages must be only labelled with symbol(s) and product identificator (EU 1272/2008 Annex I - 1.5.1.2).

Harmful chemicals/mixtures with signal word: **WARNING** must not be labelled with H and P phrases **until 125 mL** or **125 g** (EU 1272/2008 Annex I - 1.5.2).

Fecal DNA Wash Buffer

Labelling according Regulation (EC) No 1272/2008

GHS Pictogram 

Signal word: WARNING

Hazard Statements (CLP)	Precautionary Statements (CLP)
H226 – Flammable liquid and vapour. H319 – Causes serious eye irritation. H336 – May cause drowsiness or dizziness.	P210 – Keep away from heat/sparks/open flames/hot surfaces. — No smoking. P241 - Use explosion-proof electrical/ ventilating/ lighting/ equipment. P242 – Use only non-sparking tools. P243 – Take precautionary measures against static discharge. P271 – Use only outdoors or in a well-ventilated area. P261 – Avoid breathing dust/fume/gas/mist/vapours/spray. P264 – Wash with water thoroughly after handling. P280 – Wear protective gloves/ eye protection. P303, P361 & P353 – IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing and 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. P304, P340 & P312 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. P337 & P313 – If eye irritation persists: Get medical advice/attention.

2.3 Other hazards

Possible hazards from physicochemical properties:

Flammable properties. Vapour forms explosive mixtures with air.

Some hazards associated with individual components of this mixture are not relevant because the substances are present in concentrations below the GHS cut-off levels, change of physical state or because the mixture/ solution is buffered to pH 4-9 (see GHS Directive 1272/2008/EC Annex I, chapter 3.2.3.1.2.).

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1/3.2 Substance or Mixture

Fecal DNA Wash Buffer

Name, synonyms and formulae	Product Identifier	Composition	Classification according to Regulation (EC) No. 1272/2008 (CLP)
Ethanol, Ethyl alcohol, C2H6O	(CAS No.) 64-17-5 (EC No.) 200-578-6	≤25%	Flam. Liq. 2; Eye Irrit. 2; H225, H319 Concentration limits: >= 50 %: Eye Irrit. 2A, H319;
Propan-2-ol, 2-propanol, isopropanol, IPA, C3H8O	(CAS No.) 67-63-0 (EC No.) 200-661-7	≤25%	Flam. Liq. 2; Eye Irrit. 2; STOT SE 3; H225, H319, H336

3.3 Remarks

List of H, EUR and P phrases: see section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aid measures general	If necessary consult a physician. Show this safety data sheet to the medical professional in attendance.
First-aid measures after inhalation	Remove to fresh air, keep the patient warm and provide resuscitation if necessary. If symptoms develop, obtain medical attention.
First-aid measures after skin contact	Remove contaminated clothing. Rinse the affected skin or mucous membrane thoroughly under running water. (If possible) use soap.
First-aid measures after eye contact	After contact with the eyes rinse thoroughly with plenty of water for at least 15 minutes with the eyelid wide open.
First-aid measures after ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth and drink plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling section 2.2 and/or in section 11

May cause serious irritation on contact with eyes and toxic effects if swallowed.

4.3 Indication of any immediate medical attention and special treatment needed

No additional recommendations.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area.

Suitable extinguishing media	All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used.
Unsuitable extinguishing media	None known.

5.2 Special hazards arising from the substance or mixture

Fire Hazard	Flammable. May form explosive vapour-air mixtures.
Hazardous decomposition products in case of fire	Carbon oxides, Nitrogen oxides, Hydrogen chloride gas.

5.3 Advice for firefighters

Firefighting instructions	Product package burns like paper or plastic. Spray any vapours released with water. Retain fire water where possible.
Protection during firefighting	Formation of hazardous and caustic vapour-air mixtures possible. Protective breathing apparatus, independent of the ambient air (isolated equipment), and sealed protective clothing is necessary in the event of large-scale formation of toxic substances.

5.4 Additional Information

None.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Avoid sources of ignition. Evacuate unnecessary personnel. Avoid breathing vapours, mist or gas. Avoid contact with skin, eyes and clothing. Regular staff training is necessary, indicating hazards and precautions on the basis of operating instructions. Restrictions on activity must be observed.
For emergency responders	Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Wear suitable protective equipment as defined in section 8.2 Prevent further leakage or spillage if safe to do so. Avoid release of materials into the environment.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so.

Do not let product enter drains.

6.3 Methods and material for containment and cleaning up

Small Scale release	Remove sources of ignition. Make use of general chemical spill kit or other absorbent material. Clean any contaminated equipment and floors with plenty of water. Collect contaminated materials and dispose in accordance to local regulations for the disposal of hazardous chemicals.
Large Scale release	Remove sources of ignition. Bind any escaping liquid with inert absorbent material (sand, vermiculite or similar). Block/ prevent liquid entering any open drain. Only use intrinsically safe equipment during clean up. Collect contaminated materials and dispose in accordance to local regulations for the disposal of hazardous chemicals.

6.4 Reference to other sections

SECTION 5.4: Additional fire precautions.

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	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Take precautionary measures against static discharge. Handling in accordance with the instructions supplied with the product. Provide adequate ventilation. Avoid breathing vapours, mist or gas. 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. Store in a cool well ventilated place out of direct sunlight and away from ignition sources. Keep container closed when not in use. Hygroscopic.
Incompatible materials	Store separately from: Oxidizing agents, Acid anhydrides, Aluminium, Halogenated compounds, Acids.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ethanol		
United Kingdom	WEL TWA (mg/m³)	1,920 mg/m^3
United Kingdom	WEL TWA (ppm)	1,000 ppm
United Kingdom	WEL STEL (mg/m³)	N/A
United Kingdom	WEL STEL (ppm)	N/A
United Kingdom	Remark (WEL)	Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used
Propan-2-ol		
United Kingdom	WEL TWA (mg/m³)	999 mg/m^3
United Kingdom	WEL TWA (ppm)	400 ppm
United Kingdom	WEL STEL (mg/m³)	1,250 mg/m^3
United Kingdom	WEL STEL (ppm)	500 ppm
United Kingdom	Remark (WEL)	N/A

8.2 Exposure controls

Appropriate engineering controls:	Good ventilation or extraction system in the room, floor resistant to chemicals and washing facilities available.
General controls	Avoid all unnecessary exposure. Handle in accordance with good industrial hygiene and safety practice.
Respiratory protection	Respiratory protection not normally required. For nuisance exposures or if risk assessment requires use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Eye protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166 (EU) with integrated side shields or wrap-around protection.
Hand protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Wear protective gloves that satisfy the specifications of EU Directive 89/686/EEC and the standard EN374 derived from it. Exact breakthrough times to be found through the manufacturer of the protective gloves and must be observed. Gloves should be removed and replaced if there are any signs of degradation or breakthrough. If used in solution, or mixed with other substances, and under conditions which differ from EN374, contact the supplier of the CE approved gloves.
Skin and body protection	Long sleeved protective clothing.
Thermal protection	Not required for normal conditions of use.
Other information	Eating, drinking, smoking, taking snuff and storage of food in work areas and at outdoor workplaces is prohibited. Avoid contact with the skin, eyes and clothing. Rinse any clothing on which the substance has been spilled, and soak it in water. Wash hands thoroughly with soap and water when stopping work and before eating.

These recommendations are advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Fecal DNA Wash Buffer	
Physical state:	Liquid
Colour:	Colourless
Molecular Mass:	No data available
Odour:	Alcoholic
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 available
Flash point:	>30 °C
Auto-ignition temperature:	425 °C
Decomposition temperature:	No data available
Flammability (solid, gas):	Not applicable
Vapour pressure:	59 hPa
Relative vapour density at 20 °C:	No data available
Relative density:	1.06 g/cm³ (Water = 1)
Solubility:	Water: Miscible
Log Pow:	No data available
Viscosity, kinematic:	No data available
Viscosity, dynamic:	No data available
Oxidising properties:	No data available
Explosive properties:	Product is not explosive. However, formation of explosive air/ vapor mixtures are possible.
Explosive limits:	LEL 2.0% v/v UEL 15.0% v/v

9.2 Other information

Data for the other parameters of the mixtures are not available, because no registration and no chemical safety report is required.

Relevant Properties of Substance Group: None

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under normal conditions.

10.2 Chemical stability

Stable under recommended conditions.

10.3 Possibility of hazardous reactions

Can form very reactive substances with oxidizing agents.

10.4 Conditions to avoid

Extremes of temperature and direct sunlight.

Heat, flames and sparks.

10.5 Incompatible materials

Oxidizing agents, Acid anhydrides, Aluminium, Halogenated compounds, Acids.

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions – Carbon oxides, Nitrogen oxides, Hydrogen chloride gas.

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Ethanol	
LD50 Oral - Rat	10,470 mg/kg
LD50 Dermal - Rabbit	15,800 mg/kg
LC50 Inhalation - Rat - 4hr	30.000 mg/l
RTECS:	KQ6300000
Propan-2-ol	
LD50 oral rat	5,045.0 mg/kg
LC50 Inhalation rat – 8hr	16000 ppm
LD50 Dermal rabbit	12,800 mg/kg
TSCA Inventory:	Listed
California Proposition 65 List:	Not listed
Australia NICNAS:	Not listed
Canada CEPA 1999:DSL:	Yes
Japan CSCL/PRTR:	PAC Yes
Japan PDSCL:	Not listed
Japan ISHL:	Listed ≥ 1.0%/ ≥ 0.1% Article 57-2 (SDS Required)
South Korea TCCA:	Not listed
Korea Exist.Chem.Inventory:	KE-29363
RTECS:	NT8050000

Quantitative data on the toxicity of this product is not available.

Fecal DNA Wash Buffer	
Acute toxicity	Not classified.
Additional information	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Not classified.
Additional information	Based on available data, the classification criteria are not met.
Serious eye damage/irritation	Serious eye irritation Category 2
Additional information	Based on the concentration of Ethanol and Propan-2-ol in mixture.
Respiratory or skin sensitisation	Not classified.
Additional information	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Not classified.
Additional information	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.
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

Ethanol	
Ecology - Water	No additional information available
LC50 – Pimephales promelas (fathead minnow) 96hr	14,200 mg/l
LC50 – Ceriodaphnia dubia (water flea) 48hr	5,012 mg/l
EC50 – Chlorella vulgaris (Fresh water algae) 72 h (OECD Test Guideline 201)	275 mg/l
Propan-2-ol	
Ecology - Water	No additional information available
LC50 – Pimephales promelas (fathead minnow) 96hr	9,640 mg/l
EC50 – Daphnia magna (water flea) 24hr	5,102 mg/l
Immobilization EC50 Daphnia magna (water flea) 24hr	6,851 mg/l
EC50 – Desmodesmus subspicatus (green algae) 72hr	2,000 mg/l
EC50 – Algae 24hr	> 1,000 mg/l

Environmental hazards must not be labelled with P phrases until 125 mL or 125 g (EU 1272/2008 Annex I - 1.5.2).

12.2 Persistence and degradability

Ethanol	
Biodegradation	Result: 95 % - Readily biodegradable
Propan-2-ol	
Biodegradation	No data available.

12.3 Bioaccumulative potential

Ethanol	
Bioconcentration factor (BCF REACH)	No additional information available.
Log Pow	No data available.
Propan-2-ol	
Bioconcentration factor (BCF REACH)	No additional information available.
Log Pow	≤ 4

12.4 Mobility in soil

Ethanol	
Ecology - Soil	No data available.
Propan-2-ol	
Ecology - Soil	No data available.

12.5 Results of PBT and vPvB assessment

Ethanol
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
Propan-2-ol
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

Ethanol
No additional information available.
Propan-2-ol
No additional information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste disposal recommendations:	**Product** Offer surplus and non-recyclable solutions to a licensed disposal company. **Contaminated packaging** Dispose of as unused product.

SECTION 14: Transport information

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

14.1 UN number

UN-No. (ADR)	1993
UN-No. (IMDG)	1993
UN-No. (IATA)	1993
UN-No. (ADN)	1993
UN-No. (RID)	1993

14.2 UN proper shipping name

Proper Shipping Name	Flammable liquids, n.o.s. (Isopropanol, Ethanol)
Proper Shipping Name (IMDG)	Flammable liquids, n.o.s. (Isopropanol, Ethanol)
Proper Shipping Name (IATA)	Flammable liquids, n.o.s. (Isopropanol, Ethanol)
Proper Shipping Name (ADN)	Flammable liquids, n.o.s. (Isopropanol, Ethanol)
Proper Shipping Name (RID)	Flammable liquids, n.o.s. (Isopropanol, Ethanol)

14.3 Transport hazard class(es)

Transport hazard class(es) (ADR)	3
Transport hazard class(es) (IMDG)	3
Transport hazard class(es) (IATA)	3
Transport hazard class(es) (ADN)	3
Transport hazard class(es) (RID)	3

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

Special precautions for user	Warning: Flammable liquids
Danger code (Kemler)	30
EMS Number	F-E, S-E
Stowage Category	A
Limited quantity	5L
Excepted quantity	E1

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

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list ≥ 0,1 % / SCL

Contains no REACH Annex XIV substances

15.2 Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other Information

16.1 Full text of H, EUH and P statements

H226	Flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P241	Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P271	Use only outdoors or in a well-ventilated area.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash with water thoroughly after handling.
P280	Wear protective gloves/ eye protection.
P303, P361 & P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing and 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.
P304, P340 & P312	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
P337 & P313	If eye irritation persists: Get medical advice/attention.

16.2 Training Advice

Regular safety training

16.3 Abbreviations and acronyms

ADR	Accord européen relatif au transport international des marchandises Dangereuses par Route
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service number
CLP	Classification, Labeling 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	Maximal Allowed Concentration
O/W	Oil-in-Water (chemistry)

OECD	Organisation 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

16.4 Recommended Restriction on Use

Only for professional user working under controlled conditions.

Consider employee restrictions for young people (e.g. 94/33/EC)

Consider employee restrictions for pregnant women and nursing women (e.g. 92/85/EEC)

16.5 Further Information

Bioline Reagents Ltd, part of Meridian Bioscience, provides the information contained herein in good faith being up-to-date of own realizations at revision time. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgement in determining its appropriateness for a particular purpose.

Bioline Reagents Ltd, part of Meridian Bioscience, makes NO REPRESENTATIONS or WARRANTIES, either expressed or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers.

Accordingly, **Bioline Reagents Ltd**, Meridian Bioscience or other subsidiaries, will not be responsible for damages resulting from use of or reliance upon this information. See terms and conditions at the end of our price lists for additional information.

16.6 Sources of Key Data

UK – Control of Substances Hazardous to Health Regulations 2002 (as amended). Health and Safety at Work etc. Act 1974 (as amended). Guidance Workplace Exposure Limits EH40.

EU – 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. Regulation 453/2010/EU REACH - REQUIREMENTS FOR THE COMPILATION OF SAFETY DATA SHEETS Regulation 487/2013/EU, 4th adaptation of CLP regulation to technical and scientific progress. Legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015.

German act governing protection from hazardous substances (Chemicals Act / Chemikaliengesetz- ChemG), revised on August 2013 German order governing protection from hazardous substances (Ordinance on Hazardous Substances / Gefahrstoffverordnung - GefStoffV), revised on November 2010, according to Directive 98/24/EC
TRGS 900, German engineering rules governing limits in air at work, updated February 2015 SUVA .CH, Limits in air at work 2009, revised on 01.2009. KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)., updated October 2011

Republic of China – 职业病防治法

USA – Occupational Safety and Health Administration (OSHA) Occupational Exposure Limits - Table Z-1 Limits for Air Contaminants. The American Conference of Governmental Industrial Hygienists (ACGIH).

Australia - Work Health and Safety (WHS) Act and the WHS Regulations.

Fecal DNA Binding Buffer

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Date of original issue: 11/11/2019 Current revision: 03/07/2020 Version 1.1 Supersedes: 11/112019 Version 1.0

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
CAS No.:	N/A
EC No.:	N/A
REACH No.:	A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

Relevant identified uses:	Product for analytical use
Uses advised against:	Not described

1.3 Details of the supplier of the safety data sheet

Bioline Reagents Ltd, part of Meridian Bioscience
Humber Road
London
NW2 6EW
United Kingdom

Phone: +44 (0)20 8830 5300
Fax: +44 (0)20 8452 2822
E-mail: mbi.tech@meridianlifescience.com

1.4 Emergency telephone number

Emergency number:	+44 (0)1865 407 333 – English speaking (24 hours, 7 days)
Contact:	CareChem 24

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Fecal DNA Binding Buffer

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 4), H332
Acute toxicity, Dermal (Category 4), H312
Skin corrosion (Category 1B), H314
Chronic aquatic toxicity (Category 3), H412
Contact with acids liberates very toxic gas, EUH032

2.2 Label elements

According to **CLP (GHS)** inner packages must be only labelled with symbol(s) and product identificator (EU 1272/2008 Annex I - 1.5.1.2).

Harmful chemicals/mixtures with signal word: **WARNING** must not be labelled with H and P phrases **until 125 mL** (EU 1272/2008 Annex I - 1.5.2).

Fecal DNA Binding Buffer

Labelling according Regulation (EC) No 1272/2008

GHS Pictogram 

Signal Word: **Danger**

Hazard Statements (CLP)	Precautionary Statements (CLP)
H302, H312 & H332 – Harmful if swallowed, in contact with skin or if inhaled. H314 – Causes severe skin burns and eye damage. H412 – Harmful to aquatic life with long lasting effects. EUH032 – Contact with acids liberates very toxic gas.	P260 – Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. P280 – Wear protective gloves/ protective clothing/ eye protection/ face protection. P301, P312 & P330 – IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. P303, P361 & P353 – IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. P304, P340 & P310 – IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. P305, P351 & P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3 Other hazards

Possible hazards from physicochemical properties:

Some hazards associated with individual components of this mixture are not relevant because the substances are present in concentrations below the GHS cut-off levels, change of physical state or because the mixture/ solution is buffered to pH 4-9 (see GHS Directive 1272/2008/EC Annex I, chapter 3.2.3.1.2.).

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1/3.2 Substance or Mixture

Fecal DNA Binding Buffer

Name, synonyms and formulae	Product Identifier	Composition	Classification according to Regulation (EC) No. 1272/2008 (CLP)
Guanidinium rhodanide, Guanidinium thiocyanate. CH5N3 - CHNS	(CAS No.) 593-84-0 (EC No.) 209-812-1	≤50%	Acute Tox. 4; Skin Corr. 1B; Aquatic Chronic 3; H302, H332, H312, H314, H412
Glycerol, 1,2,3-PropanetriolGlycerin C3H8O3	(CAS No.) 56-81-5 (EC No.) 200-289-5	≤50%	Not a hazardous substance or mixture

3.3 Remarks

List of H, EUR and P phrases: see section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aid measures general	If necessary consult a physician. Show this safety data sheet to the medical professional in attendance.
First-aid measures after inhalation	Remove to fresh air, keep the patient warm and provide resuscitation if necessary. If symptoms develop, obtain medical attention.
First-aid measures after skin contact	Remove contaminated clothing. Rinse the affected skin or mucous membrane thoroughly under running water. (If possible) use soap.
First-aid measures after eye contact	After contact with the eyes rinse thoroughly with plenty of water for at least 15 minutes with the eyelid wide open.
First-aid measures after ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth and drink plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling section 2.2 and/or in section 11
May cause damage in contact with eyes.

4.3 Indication of any immediate medical attention and special treatment needed

No additional recommendations.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area.

Suitable extinguishing media	Use DRY POWDER or CARBON DIOXIDE. In case of more serious fires, also alcohol-resistant foam.
Unsuitable extinguishing media	Do not use a direct stream of water to extinguish.

5.2 Special hazards arising from the substance or mixture

Fire Hazard	No data available.
Hazardous decomposition products in case of fire	Carbon oxides, Nitrogen oxides, Sulphur oxides, Hydrogen cyanide gas and Ammonia.

5.3 Advice for firefighters

Firefighting instructions	Product package burns like paper or plastic. Retain fire water where possible.
Protection during firefighting	Protective breathing apparatus, independent of the ambient air (isolated equipment), and sealed protective clothing is necessary in the event of large-scale formation of toxic substances.

5.4 Additional Information

None.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Evacuate unnecessary personnel. Avoid breathing vapours, mist or gas. Avoid contact with skin, eyes and clothing. Regular staff training is necessary, indicating hazards and precautions on the basis of operating instructions. Restrictions on activity must be observed.
For emergency responders	Wear suitable protective equipment as defined in section 8.2 Prevent further leakage or spillage if safe to do so. Avoid release of materials into the environment.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so.

Do not let product enter drains.

Discharge into the environment must be avoided.

6.3 Methods and material for containment and cleaning up

Small Scale release	Make use of general chemical spill kit or other absorbent material. Clean any contaminated equipment and floors with plenty of water. Collect small amounts of leaked liquid and dispose via appropriate chemical waste stream.
Large Scale release	Bind any escaping liquid with inert absorbent material (sand, vermiculite or similar). Block/ prevent liquid entering any open drain. Collect contaminated materials and dispose in accordance to local regulations for the disposal of hazardous chemicals.

6.4 Reference to other sections

SECTION 5.4: Additional fire precautions.

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	Handling in accordance with the instructions supplied with the product. Provide adequate ventilation. Avoid breathing vapours, mist or gas. 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. Store in a cool well ventilated place out of direct sunlight. Keep container closed when not in use. Hygroscopic. Light Sensitive.
Incompatible materials	Store separately from: Strong bases, Strong oxidizing agents, Strong acids, Cyanides.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Guanidinium rhodanide		
United Kingdom	WEL TWA (mg/m³)	N/A
United Kingdom	WEL TWA (ppm)	N/A
United Kingdom	WEL STEL (mg/m³)	N/A
United Kingdom	WEL STEL (ppm)	N/A
United Kingdom	Remark (WEL)	Contains no substances with occupational exposure limit values.
Glycerol		
United Kingdom	WEL TWA (mg/m³)	10 mg/m^3
United Kingdom	WEL TWA (ppm)	N/A
United Kingdom	WEL STEL (mg/m³)	N/A
United Kingdom	WEL STEL (ppm)	N/A
United Kingdom	Remark (WEL)	Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.

8.2 Exposure controls

Appropriate engineering controls:	Good ventilation or extraction system in the room, floor resistant to chemicals and washing facilities available.
General controls	Avoid all unnecessary exposure. Handle in accordance with good industrial hygiene and safety practice.
Respiratory protection	Respiratory protection not normally required. For nuisance exposures or if risk assessment requires, use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Eye protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166 (EU) with integrated side shields or wrap-around protection.
Hand protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Wear protective gloves that satisfy the specifications of EU Directive 89/686/EEC and the standard EN374 derived from it. Exact breakthrough times to be found through the manufacturer of the protective gloves and must be observed. Gloves should be removed and replaced if there are any signs of degradation or breakthrough. If used in solution, or mixed with other substances, and under conditions which differ from EN374, contact the supplier of the CE approved gloves.
Skin and body protection	Long sleeved protective clothing.
Thermal protection	Not required for normal conditions of use.
Other information	Eating, drinking, smoking, taking snuff and storage of food in work areas and at outdoor workplaces is prohibited. Avoid contact with the skin, eyes and clothing. Rinse any clothing on which the substance has been spilled, and soak it in water. Wash hands thoroughly with soap and water when stopping work and before eating.

These recommendations are advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Fecal DNA Binding Buffer	
Physical state:	Liquid
Colour:	Colourless
Molecular Mass:	No data available
Odour:	Mild
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 available
Flash point:	400 °C (752 °F)
Auto-ignition temperature:	Product is not selfigniting
Decomposition temperature:	No data available
Flammability (solid, gas):	Not applicable
Vapour pressure:	0.1 hPa
Relative vapour density at 20 °C:	No data available
Relative density:	~1.0 g/cm³ (Water = 1)
Solubility:	Fully miscible
Log Pow:	No data available
Viscosity, kinematic:	No data available
Viscosity, dynamic:	No data available
Oxidising properties:	No data available
Explosive properties:	Product does not present an explosion hazard
Explosive limits:	LEL 0.0% v/v UEL 0.9% v/v

9.2 Other information

Data for the other parameters of the mixtures are not available, because no registration and no chemical safety report is required.

Relevant Properties of Substance Group: None

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under normal conditions.

10.2 Chemical stability

Stable under recommended conditions.

10.3 Possibility of hazardous reactions

None known.

10.4 Conditions to avoid

Extremely high or low temperatures.

10.5 Incompatible materials

Strong bases, Strong oxidizing agents, Strong acids, Cyanides.

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions – Carbon oxides, Nitrogen oxides, Sulphur oxides, Hydrogen cyanide gas and Ammonia.

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Guanidinium rhodanide	
LD50 oral rat	593 mg/kg
LC50 inhalation rat 4hr	5.319 mg/L
LC50 dermal rabbit	>2000 mg/m³
LD50 intraperitoneal mouse	300 mg/kg
TSCA Inventory:	Listed
California Proposition 65 List:	Not listed
Australia NICNAS:	Not listed
Canada CEPA 1999:	DSL Yes
Japan CSCL/PRTR:	Not listed
Japan PDSCL:	Not listed
Japan ISHL:	Not listed
South Korea TCCA:	Not listed
Korea Exist.Chem.Inventory:	Not listed
RTECS:	Not listed
Glycerol	
LD50 oral rat	12,600 mg/kg
LC50 inhalation rat 4hr	>2.75 mg/l
LD50 Dermal rabbit	10,000 mg/kg
LD50 Dermal guinea pig	56750 mg/kg
TSCA Inventory:	Listed (1,2,3-Propanetriol)
California Proposition 65 List:	Not listed
Australia NICNAS:	Not listed
Canada CEPA 1999:DSL:	Not listed
Japan CSCL/PRTR:	Not listed
Japan PDSCL:	Not listed
Japan ISHL:	Not listed
South Korea TCCA:	Not listed
Korea Exist.Chem.Inventory:	KE-29297
RTECS:	MA8050000

Quantitative data on the toxicity of this product is not available.

Fecal DNA Binding Buffer	
Acute toxicity	Inhalation, Oral and Dermal Category 4
Additional information	Based on the concentration of Guanidinium rhodanide in the solution.
Skin corrosion/irritation	Skin corrosion Category 1B
Additional information	Based on the concentration of Guanidinium rhodanide in the solution.
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.
Additional information	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.
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

Guanidinium rhodanide	
Ecology - Water	Harmful to aquatic life with long lasting effects. Avoid contact of substance/mixture to environment.
EC50 - Daphnia magna (Water flea) 48hr	42.4 mg/l
Glycerol	
Ecology - Water	Not Classified
LC50 – Fish (Salmo gairdneri) 96hr	54,000 mg/l
LC50 - Bacteria, activated sludge	> 1,000 mg/l
EC50 – Daphnia (daphnia magna, locomotor effect) 24hr	> 10,000 mg/l

Environmental hazards must not be labelled with P phrases until 125 mL or 125 g (EU 1272/2008 Annex I - 1.5.2).

12.2 Persistence and degradability

Guanidinium rhodanide	
Biodegradation	No data available
Glycerol	
Biodegradation	No data available

12.3 Bioaccumulative potential

Guanidinium rhodanide	
Bioconcentration factor (BCF REACH)	No data available
Log Pow	No data available
Glycerol	
Bioconcentration factor (BCF REACH)	No additional information available
Log Pow	-1.76

12.4 Mobility in soil

Guanidinium rhodanide	
Ecology - Soil	No data available
Glycerol	
Ecology - Soil	Miscible with water.

12.5 Results of PBT and vPvB assessment

Guanidinium rhodanide
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
Glycerol
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

Guanidinium rhodanide
Harmful to aquatic life with long lasting effects.
Glycerol
No additional information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste disposal recommendations:	**Product** Offer surplus and non-recyclable solutions to a licensed disposal company. **Contaminated packaging** Dispose of as unused product.

SECTION 14: Transport information

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

14.1 UN number

UN-No. (ADR)	1760
UN-No. (IMDG)	1760
UN-No. (IATA)	1760
UN-No. (ADN)	1760
UN-No. (RID)	1760

14.2 UN proper shipping name

Proper Shipping Name	CORROSIVE LIQUID, N.O.S. (guanidinium thiocyanate)
Proper Shipping Name (IMDG)	CORROSIVE LIQUID, N.O.S. (guanidinium thiocyanate)
Proper Shipping Name (IATA)	CORROSIVE LIQUID, N.O.S. (guanidinium thiocyanate)
Proper Shipping Name (ADN)	CORROSIVE LIQUID, N.O.S. (guanidinium thiocyanate)
Proper Shipping Name (RID)	CORROSIVE LIQUID, N.O.S. (guanidinium thiocyanate)

14.3 Transport hazard class(es)

Transport hazard class(es) (ADR)	8
Transport hazard class(es) (IMDG)	8
Transport hazard class(es) (IATA)	8
Transport hazard class(es) (ADN)	8
Transport hazard class(es) (RID)	8

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	No data available
Transport by sea	No data available
Air transport	No data available
Inland waterway transport	No data available
Rail transport	No data available

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

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list ≥ 0,1 % / SCL

Contains no REACH Annex XIV substances

15.2 Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other Information

16.1 Full text of H, EUH and P statements

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H314	Causes severe skin burns and eye damage.
H412	Harmful to aquatic life with long lasting effects.
EUH032	Contact with acids liberates very toxic gas.
P260	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301, P312 & P330	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
P303, P361 & P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304, P340 & P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
P305, P351 & P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

16.2 Training Advice

Regular safety training

16.3 Abbreviations and acronyms

ADR	Accord européen relatif au transport international des marchandises Dangereuses par Route
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service number
CLP	Classification, Labeling 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	Maximal Allowed Concentration
O/W	Oil-in-Water (chemistry)
OECD	Organisation 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

16.4 Recommended Restriction on Use

Only for professional user working under controlled conditions.

Consider employee restrictions for young people (e.g. 94/33/EC)

Consider employee restrictions for pregnant women and nursing women (e.g. 92/85/EEC)

16.5 Further Information

Bioline Reagents Ltd, part of Meridian Bioscience, provides the information contained herein in good faith being up-to-date of own realizations at revision time. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgement in determining its appropriateness for a particular purpose.

Bioline Reagents Ltd, part of Meridian Bioscience, makes NO REPRESENTATIONS or WARRANTIES, either expressed or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers.

Accordingly, **Bioline Reagents Ltd**, Meridian Bioscience or other subsidiaries, will not be responsible for damages resulting from use of or reliance upon this information. See terms and conditions at the end of our price lists for additional information.

16.6 Sources of Key Data

UK – Control of Substances Hazardous to Health Regulations 2002 (as amended). Health and Safety at Work etc. Act 1974 (as amended). Guidance Workplace Exposure Limits EH40.

EU – 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. Regulation 453/2010/EU REACH - REQUIREMENTS FOR THE COMPILATION OF SAFETY DATA SHEETS Regulation 487/2013/EU, 4th adaptation of CLP regulation to technical and scientific progress. Legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015.

German act governing protection from hazardous substances (Chemicals Act / Chemikaliengesetz- ChemG), revised on August 2013 German order governing protection from hazardous substances (Ordinance on Hazardous Substances / Gefahrstoffverordnung - GefStoffV), revised on November 2010, according to Directive 98/24/EC
TRGS 900, German engineering rules governing limits in air at work, updated February 2015 SUVA .CH, Limits in air at work 2009, revised on 01.2009. KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)., updated October 2011

Republic of China – 职业病防治法

USA – Occupational Safety and Health Administration (OSHA) Occupational Exposure Limits - Table Z-1 Limits for Air Contaminants. The American Conference of Governmental Industrial Hygienists (ACGIH).

Australia - Work Health and Safety (WHS) Act and the WHS Regulations.

DNA Elution Buffer

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Date of original issue: 04/03/2020 Current revision: 30/06/2020 Version 1.1 Supersedes: 04/03/2020 Version 1.0

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

1.1 Product identifier

Product form:	Mixture
Product name:	DNA Elution Buffer
CAS No.:	N/A
EC No.:	N/A
REACH No.:	A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

Relevant identified uses:	Product for analytical use
Uses advised against:	Not described

1.3 Details of the supplier of the safety data sheet

Bioline Reagents Ltd, part of Meridian Bioscience

Humber Road
London
NW2 6EW
United Kingdom

Phone: +44 (0)20 8830 5300
Fax: +44 (0)20 8452 2822
E-mail: mbi.tech@meridianlifescience.com

1.4 Emergency telephone number

Emergency number:	+44 (0)1865 407 333 – English speaking (24 hours, 7 days)
Contact:	CareChem 24

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

DNA Elution Buffer

Classification according to Regulation (EC) No 1272/2008

Not a hazardous substance or mixture

2.2 Label elements

DNA Elution Buffer

Labelling according Regulation (EC) No 1272/2008

Not a hazardous substance or mixture

Hazard Statements (CLP)	Precautionary Statements (CLP)
None	None

2.3 Other hazards

Possible hazards from physicochemical properties:

Some hazards associated with individual components of this mixture are not relevant because the substances are present in concentrations below the GHS cut-off levels, change of physical state or because the mixture/ solution is buffered to pH 4-9 (see GHS Directive 1272/2008/EC Annex I, chapter 3.2.3.1.2.).

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1/3.2 Substance or Mixture

DNA Elution Buffer

Name, synonyms and formulae	Product Identifier	Composition	Classification according to Regulation (EC) No. 1272/2008 (CLP)
N/A	N/A	N/A	N/A

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of REACH annex II

3.3 Remarks

List of H, EUR and P phrases: see section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aid measures general	If necessary consult a physician. Show this safety data sheet to the medical professional in attendance.
First-aid measures after inhalation	Remove to fresh air, keep the patient warm and provide resuscitation if necessary. If symptoms develop, obtain medical attention.
First-aid measures after skin contact	Remove contaminated clothing. Rinse the affected skin or mucous membrane thoroughly under running water. (If possible) use soap.
First-aid measures after eye contact	After contact with the eyes rinse thoroughly with plenty of water for at least 15 minutes with the eyelid wide open.
First-aid measures after ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth and drink plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling section 2.2 and/or in section 11
Not expected to present a significant hazard under anticipated conditions of normal use.

4.3 Indication of any immediate medical attention and special treatment needed

No additional recommendations.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area.

Suitable extinguishing media	All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used.
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 oxides, Nitrogen oxides, Sodium oxides.

5.3 Advice for firefighters

Firefighting instructions	Product package burns like paper or plastic. Spray any vapours released with water. Retain fire water where possible.
Protection during firefighting	Protective breathing apparatus, independent of the ambient air (isolated equipment), and sealed protective clothing is necessary in the event of large-scale formation of toxic substances.

5.4 Additional Information

None.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Evacuate unnecessary personnel. Avoid breathing vapours, mist or gas. Avoid contact with skin, eyes and clothing. Regular staff training is necessary, indicating hazards and precautions on the basis of operating instructions. Restrictions on activity must be observed.
For emergency responders	Wear suitable protective equipment as defined in section 8.2 Prevent further leakage or spillage if safe to do so. Avoid release of materials into the environment.

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and material for containment and cleaning up

Small Scale release	Make use of general chemical spill kit or other absorbent material. Clean any contaminated equipment and floors with plenty of water. Collect small amounts of leaked liquid and flush with copious amounts of water into drains.
Large Scale release	Bind any escaping liquid with inert absorbent material (sand, vermiculite or similar). Block/ prevent liquid entering any open drain. Collect contaminated materials and dispose in accordance to local regulations for the disposal of hazardous chemicals.

6.4 Reference to other sections

SECTION 5.4: Additional fire precautions.

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	Handling in accordance with the instructions supplied with the product. Provide adequate ventilation. Avoid breathing vapours, mist or gas. 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. Store in a cool well ventilated place out of direct sunlight. Keep container closed when not in use.
Incompatible materials	Store separately from: Strong oxidizing agents.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

DNA Elution Buffer		
United Kingdom	WEL TWA (mg/m³)	N/A
United Kingdom	WEL TWA (ppm)	N/A
United Kingdom	WEL STEL (mg/m³)	N/A
United Kingdom	WEL STEL (ppm)	N/A
United Kingdom	Remark (WEL)	Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls:	Good ventilation or extraction system in the room, floor resistant to chemicals and washing facilities available.
General controls	Avoid all unnecessary exposure. Handle in accordance with good industrial hygiene and safety practice.
Respiratory protection	Respiratory protection not required. For nuisance exposures or if risk assessment requires, use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Eye protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166 (EU) with integrated side shields or wrap-around protection.
Hand protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Wear protective gloves that satisfy the specifications of EU Directive 89/686/EEC and the standard EN374 derived from it. Exact breakthrough times to be found through the manufacturer of the protective gloves and must be observed. Gloves should be removed and replaced if there are any signs of degradation or breakthrough. If used in solution, or mixed with other substances, and under conditions which differ from EN374, contact the supplier of the CE approved gloves.
Skin and body protection	Long sleeved protective clothing.
Thermal protection	Not required for normal conditions of use.
Other information	Eating, drinking, smoking, taking snuff and storage of food in work areas and at outdoor workplaces is prohibited. Avoid contact with the skin, eyes and clothing. Rinse any clothing on which the substance has been spilled, and soak it in water. Wash hands thoroughly with soap and water when stopping work and before eating.

These recommendations are advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

DNA Elution Buffer	
Physical state:	Liquid
Colour:	Colourless
Molecular Mass:	No data available
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:	No data available
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:	~1.0 g/cm³ (Water = 1)
Solubility:	No data available
Log Pow:	No data available
Viscosity, kinematic:	No data available
Viscosity, dynamic:	No data available
Oxidising properties:	No data available
Explosive properties:	No data available
Explosive limits:	No data available

9.2 Other information

Data for the other parameters of the mixtures are not available, because no registration and no chemical safety report is required.

Relevant Properties of Substance Group: None

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under normal conditions.

10.2 Chemical stability

Stable under recommended 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

Hazardous decomposition products formed under fire conditions – Carbon oxides, Nitrogen oxides, Sodium oxides.

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Quantitative data on the toxicity of this product is not available.

DNA Elution Buffer	
Acute toxicity	Not classified.
Additional information	Based on available data, the classification criteria are not met.
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.
Additional information	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.
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

DNA Elution Buffer	
Ecology - Water	Not Classified

Environmental hazards must not be labelled with P phrases until 125 mL or 125 g (EU 1272/2008 Annex I - 1.5.2).

12.2 Persistence and degradability

DNA Elution Buffer	
Biodegradation	No data available

12.3 Bioaccumulative potential

DNA Elution Buffer	
Bioconcentration factor (BCF REACH)	No additional information available
Log Pow	No data available.

12.4 Mobility in soil

DNA Elution Buffer	
Ecology - Soil	No data available

12.5 Results of PBT and vPvB assessment

DNA Elution 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

DNA Elution Buffer
No additional information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste disposal recommendations:	**Product** Offer surplus and non-recyclable solutions to a licensed disposal company. **Contaminated packaging** Dispose of as unused product.

SECTION 14: Transport information

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

14.1 UN number

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

14.2 UN proper shipping name

Proper Shipping Name	Not regulated
Proper Shipping Name (IMDG)	Not regulated
Proper Shipping Name (IATA)	Not regulated
Proper Shipping Name (ADN)	Not regulated
Proper Shipping Name (RID)	Not regulated

14.3 Transport hazard class(es)

Transport hazard class(es) (ADR)	Not regulated
Transport hazard class(es) (IMDG)	Not regulated
Transport hazard class(es) (IATA)	Not regulated
Transport hazard class(es) (ADN)	Not regulated
Transport hazard class(es) (RID)	Not regulated

14.4 Packing group

Packing group	Not regulated
Packing group (IMDG)	Not regulated
Packing group (IATA)	Not regulated
Packing group (ADN)	Not regulated
Packing group (RID)	Not regulated

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 regulated
Transport by sea	Not regulated
Air transport	Not regulated
Inland waterway transport	Not regulated
Rail transport	Not regulated

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

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list ≥ 0,1 % / SCL

Contains no REACH Annex XIV substances

15.2 Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other Information

16.1 Full text of H, EUH and P statements

None	N/A

16.2 Training Advice

Regular safety training

16.3 Abbreviations and acronyms

ADR	Accord européen relatif au transport international des marchandises Dangereuses par Route
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service number
CLP	Classification, Labeling 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	Maximal Allowed Concentration
O/W	Oil-in-Water (chemistry)
OECD	Organisation 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

16.4 Recommended Restriction on Use

Only for professional user working under controlled conditions.

Look about employee restrictions for young people (e.g. 94/33/EC)

Look about employee restrictions for pregnant women and nursing women (e.g. 92/85/EEC)

16.5 Further Information

Bioline Reagents Ltd, part of Meridian Bioscience, provides the information contained herein in good faith being up-to-date of own realizations at revision time. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgement in determining its appropriateness for a particular purpose.

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16.6 Sources of Key Data

UK – Control of Substances Hazardous to Health Regulations 2002 (as amended). Health and Safety at Work etc. Act 1974 (as amended). Guidance Workplace Exposure Limits EH40.

EU – 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. Regulation 453/2010/EU REACH - REQUIREMENTS FOR THE COMPILATION OF SAFETY DATA SHEETS Regulation 487/2013/EU, 4th adaptation of CLP regulation to technical and scientific progress. Legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015.

German act governing protection from hazardous substances (Chemicals Act / Chemikaliengesetz- ChemG), revised on August 2013 German order governing protection from hazardous substances (Ordinance on Hazardous Substances / Gefahrstoffverordnung - GefStoffV), revised on November 2010, according to Directive 98/24/EC
TRGS 900, German engineering rules governing limits in air at work, updated February 2015 SUVA .CH, Limits in air at work 2009, revised on 01.2009. KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)., updated October 2011

Republic of China – 职业病防治法

USA – Occupational Safety and Health Administration (OSHA) Occupational Exposure Limits - Table Z-1 Limits for Air Contaminants. The American Conference of Governmental Industrial Hygienists (ACGIH).

Australia - Work Health and Safety (WHS) Act and the WHS Regulations.

Fecal Prep Solution

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Date of original issue: 04/03/2020 Current revision: 03/07/2020 Version 1.1 Supersedes: 04/03/2020 Version 1.0

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

1.1 Product identifier

Product form:	Mixture
Product name:	Fecal Prep Solution
CAS No.:	N/A
EC No.:	N/A
REACH No.:	A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

Relevant identified uses:	Product for analytical use
Uses advised against:	Not described

1.3 Details of the supplier of the safety data sheet

Bioline Reagents Ltd, part of Meridian Bioscience

Humber Road	Phone: +44 (0)20 8830 5300
London	Fax: +44 (0)20 8452 2822
NW2 6EW	E-mail: mbi.tech@meridianlifescience.com
United Kingdom	

1.4 Emergency telephone number

Emergency number:	+44 (0)1865 407 333 – English speaking (24 hours, 7 days)
Contact:	CareChem 24

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Fecal Prep Solution

Classification according to Regulation (EC) No 1272/2008

Not a hazardous substance or mixture

2.2 Label elements

Fecal Prep Solution

Labelling according Regulation (EC) No 1272/2008

Not a hazardous substance or mixture

Hazard Statements (CLP)	Precautionary Statements (CLP)
None	None

2.3 Other hazards

Possible hazards from physicochemical properties:

Some hazards associated with individual components of this mixture are not relevant because the substances are present in concentrations below the GHS cut-off levels, change of physical state or because the mixture/ solution is buffered to pH 4-9 (see GHS Directive 1272/2008/EC Annex I, chapter 3.2.3.1.2.).

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1/3.2 Substance or Mixture

Fecal Prep Solution

Name, synonyms and formulae	Product Identifier	Composition	Classification according to Regulation (EC) No. 1272/2008 (CLP)
N/A	N/A	N/A	N/A

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of REACH annex II

3.3 Remarks

List of H, EUR and P phrases: see section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aid measures general	If necessary consult a physician. Show this safety data sheet to the medical professional in attendance.
First-aid measures after inhalation	Remove to fresh air, keep the patient warm and provide resuscitation if necessary. If symptoms develop, obtain medical attention.
First-aid measures after skin contact	Remove contaminated clothing. Rinse the affected skin or mucous membrane thoroughly under running water. (If possible) use soap.
First-aid measures after eye contact	After contact with the eyes rinse thoroughly with plenty of water for at least 15 minutes with the eyelid wide open.
First-aid measures after ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth and drink plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling section 2.2 and/or in section 11
Not expected to present a significant hazard under anticipated conditions of normal use.

4.3 Indication of any immediate medical attention and special treatment needed

No additional recommendations.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area.

Suitable extinguishing media	All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used.
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 oxides, Nitrogen oxides, Sodium oxides.

5.3 Advice for firefighters

Firefighting instructions	Product package burns like paper or plastic. Spray any vapours released with water. Retain fire water where possible.
Protection during firefighting	Protective breathing apparatus, independent of the ambient air (isolated equipment), and sealed protective clothing is necessary in the event of large-scale formation of toxic substances.

5.4 Additional Information

None.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Evacuate unnecessary personnel. Avoid breathing vapours, mist or gas. Avoid contact with skin, eyes and clothing. Regular staff training is necessary, indicating hazards and precautions on the basis of operating instructions. Restrictions on activity must be observed.
For emergency responders	Wear suitable protective equipment as defined in section 8.2 Prevent further leakage or spillage if safe to do so. Avoid release of materials into the environment.

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and material for containment and cleaning up

Small Scale release	Make use of general chemical spill kit or other absorbent material. Clean any contaminated equipment and floors with plenty of water. Collect small amounts of leaked liquid and flush with copious amounts of water into drains.
Large Scale release	Bind any escaping liquid with inert absorbent material (sand, vermiculite or similar). Block/ prevent liquid entering any open drain. Collect contaminated materials and dispose in accordance to local regulations for the disposal of hazardous chemicals.

6.4 Reference to other sections

SECTION 5.4: Additional fire precautions.

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	Handling in accordance with the instructions supplied with the product. Provide adequate ventilation. Avoid breathing vapours, mist or gas. 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. Store in a cool well ventilated place out of direct sunlight. Keep container closed when not in use.
Incompatible materials	Store separately from: Strong oxidizing agents.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Fecal Prep Solution		
United Kingdom	WEL TWA (mg/m³)	N/A
United Kingdom	WEL TWA (ppm)	N/A
United Kingdom	WEL STEL (mg/m³)	N/A
United Kingdom	WEL STEL (ppm)	N/A
United Kingdom	Remark (WEL)	Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls:	Good ventilation or extraction system in the room, floor resistant to chemicals and washing facilities available.
General controls	Avoid all unnecessary exposure. Handle in accordance with good industrial hygiene and safety practice.
Respiratory protection	Respiratory protection not required. For nuisance exposures or if risk assessment requires, use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Eye protection	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166 (EU) with integrated side shields or wrap-around protection.
Hand protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Wear protective gloves that satisfy the specifications of EU Directive 89/686/EEC and the standard EN374 derived from it. Exact breakthrough times to be found through the manufacturer of the protective gloves and must be observed. Gloves should be removed and replaced if there are any signs of degradation or breakthrough. If used in solution, or mixed with other substances, and under conditions which differ from EN374, contact the supplier of the CE approved gloves.
Skin and body protection	Long sleeved protective clothing.
Thermal protection	Not required for normal conditions of use.
Other information	Eating, drinking, smoking, taking snuff and storage of food in work areas and at outdoor workplaces is prohibited. Avoid contact with the skin, eyes and clothing. Rinse any clothing on which the substance has been spilled, and soak it in water. Wash hands thoroughly with soap and water when stopping work and before eating.

These recommendations are advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Fecal Prep Solution	
Physical state:	Liquid
Colour:	Colourless
Molecular Mass:	No data available
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:	No data available
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:	~1.0 g/cm³ (Water = 1)
Solubility:	No data available
Log Pow:	No data available
Viscosity, kinematic:	No data available
Viscosity, dynamic:	No data available
Oxidising properties:	No data available
Explosive properties:	No data available
Explosive limits:	No data available

9.2 Other information

Data for the other parameters of the mixtures are not available, because no registration and no chemical safety report is required.

Relevant Properties of Substance Group: None

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under normal conditions.

10.2 Chemical stability

Stable under recommended 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

Hazardous decomposition products formed under fire conditions – Carbon oxides, Nitrogen oxides, Sodium oxides.

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Quantitative data on the toxicity of this product is not available.

Fecal Prep Solution	
Acute toxicity	Not classified.
Additional information	Based on available data, the classification criteria are not met.
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.
Additional information	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.
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

Fecal Prep Solution	
Ecology - Water	Not Classified

Environmental hazards must not be labelled with P phrases until 125 mL or 125 g (EU 1272/2008 Annex I - 1.5.2).

12.2 Persistence and degradability

Fecal Prep Solution	
Biodegradation	No data available

12.3 Bioaccumulative potential

Fecal Prep Solution	
Bioconcentration factor (BCF REACH)	No additional information available
Log Pow	No data available

12.4 Mobility in soil

Fecal Prep Solution	
Ecology - Soil	No data available

12.5 Results of PBT and vPvB assessment

Fecal Prep Solution
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

Fecal Prep Solution
No additional information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste disposal recommendations:	**Product** Offer surplus and non-recyclable solutions to a licensed disposal company. **Contaminated packaging** Dispose of as unused product.

SECTION 14: Transport information

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

14.1 UN number

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

14.2 UN proper shipping name

Proper Shipping Name	Not regulated
Proper Shipping Name (IMDG)	Not regulated
Proper Shipping Name (IATA)	Not regulated
Proper Shipping Name (ADN)	Not regulated
Proper Shipping Name (RID)	Not regulated

14.3 Transport hazard class(es)

Transport hazard class(es) (ADR)	Not regulated
Transport hazard class(es) (IMDG)	Not regulated
Transport hazard class(es) (IATA)	Not regulated
Transport hazard class(es) (ADN)	Not regulated
Transport hazard class(es) (RID)	Not regulated

14.4 Packing group

Packing group	Not regulated
Packing group (IMDG)	Not regulated
Packing group (IATA)	Not regulated
Packing group (ADN)	Not regulated
Packing group (RID)	Not regulated

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 regulated
Transport by sea	Not regulated
Air transport	Not regulated
Inland waterway transport	Not regulated
Rail transport	Not regulated

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

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list ≥ 0,1 % / SCL

Contains no REACH Annex XIV substances

15.2 Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other Information

16.1 Full text of H, EUH and P statements

None	N/A

16.2 Training Advice

Regular safety training

16.3 Abbreviations and acronyms

ADR	Accord européen relatif au transport international des marchandises Dangereuses par Route
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service number
CLP	Classification, Labeling 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	Maximal Allowed Concentration
O/W	Oil-in-Water (chemistry)
OECD	Organisation 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

16.4 Recommended Restriction on Use

Only for professional user working under controlled conditions.

Look about employee restrictions for young people (e.g. 94/33/EC)

Look about employee restrictions for pregnant women and nursing women (e.g. 92/85/EEC)

16.5 Further Information

Bioline Reagents Ltd, part of Meridian Bioscience, provides the information contained herein in good faith being up-to-date of own realizations at revision time. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgement in determining its appropriateness for a particular purpose.

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16.6 Sources of Key Data

UK – Control of Substances Hazardous to Health Regulations 2002 (as amended). Health and Safety at Work etc. Act 1974 (as amended). Guidance Workplace Exposure Limits EH40.

EU – 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. Regulation 453/2010/EU REACH - REQUIREMENTS FOR THE COMPILATION OF SAFETY DATA SHEETS Regulation 487/2013/EU, 4th adaptation of CLP regulation to technical and scientific progress. Legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015.

German act governing protection from hazardous substances (Chemicals Act / Chemikaliengesetz- ChemG), revised on August 2013 German order governing protection from hazardous substances (Ordinance on Hazardous Substances / Gefahrstoffverordnung - GefStoffV), revised on November 2010, according to Directive 98/24/EC
TRGS 900, German engineering rules governing limits in air at work, updated February 2015 SUVA .CH, Limits in air at work 2009, revised on 01.2009. KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)., updated October 2011

Republic of China – 职业病防治法

USA – Occupational Safety and Health Administration (OSHA) Occupational Exposure Limits - Table Z-1 Limits for Air Contaminants. The American Conference of Governmental Industrial Hygienists (ACGIH).

Australia - Work Health and Safety (WHS) Act and the WHS Regulations.