Safety Data Sheet

Elongation Buffer (EL)

DNASCRIPT

According_to_Regulation_CLP14

Version:1 Version date:02/11/2020 Language:EN

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name/designation	:	Elongation Buffer
Article No (user)	:	4S100102.05

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

Relevant identified uses : Laboratory reagents for the operation of our DNA printer.

1.3. Details of the supplier of the safety data sheet

Supplier

Name: DNA Script Street: 67 Avenue de Fontainebleau Postal code/City: 94270 Le Kremlin-Bicêtre Country: France : Telephone: +33 (156) 20 56 00 E-mail: contact@dnascript.co

1.4. Emergency Telephone Number

United Kingdom: In England and Wales: dial 111 (NHS 111), In Scotland: dial 111 (NHS 24), In Northern Ireland: Contact your local GP or pharmacist during normal hours. During GP Out-of-Hours (www.gpoutofhours.hscni.net/): Belfast HSC Trust, (North & West) 028 9074 4447, (South & East) 028 9079 6220 South Eastern HSC Trust, (North Down & Ards) 028 9182 2344, (Lisburn & Downpatrick) 028 9260 2204, Dalriada Urgent Care (Northern Trust area) 028 2566 3500, Southern HSC Trust 028 3839 9201, Western Urgent Care 028 7186 5195

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

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

Classification	Hazard stat	Hazard statements (H)		
Acute Tox. 4	H302	Harmful if swallowed		
Acute Tox. 4	H332	Harmful if inhaled.		
Aquatic Chronic 2	H411	Toxic to aquatic life with long lasting effects.		

2.2. Label elements

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

Hazard pictograms

Signal word Product identifiers



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Hazard Statements	H302 - Harmful if swallowed
	H332 - Harmful if inhaled.
	H411 - Toxic to aquatic life with long lasting effects.
Supplemental Hazard information (EU)	-
Precautionary Statements - General	-
Precautionary Statements - Prevention	P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
	P270 - Do not eat, drink or smoke when using this product.
	P271 - Use only outdoors or in a well-ventilated area.
Precautionary Statements - Response	P312 - Call a POISON CENTER/doctor//if you feel unwell.
	P330 - Rinse mouth.
Precautionary Statements - Storage	-
Precautionary Statements - Disposal	P501 - Dispose of contents and container in accordance with applicable
	local/regional/national/international regulations.

2.3. Other hazards

Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Substance	C (%)	Classification	Specific concentration limits	Note
dimethylarsinic acid	1.0% ≤C≤	H301: Toxic if swallowed.	-	-
CAS N°:75-60-5	20.0%	H331: Toxic if inhaled.		
EC N°:200-883-4		H400: Very toxic to aquatic life.		
IDX N°:		H410: Very toxic to aquatic life with long lasting effects.		

3.2. Mixtures

The mixture does not contain any substances classified as Substances of Very High Concern (SVHC) by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table.

3.3. Remark

Text phrases and H- EUH-: see section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information	:	In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Do not leave affected person unattended.
To Base to a to be letter.		Keep affected person warm, still and covered.
Following inhalation	:	Remove person to fresh air and keep comfortable for breathing.
		If the victim is unconscious but breathing normally, place her in recovery position and seek medical advice.
		No resuscitation mouth-to-mouth or mouth-to-nose. Ambu use a mask or respirator.
		If breathing is irregular or stopped, administer artificial respiration.
		After inhaling vapours the first signs of poisoning can show up hours later, so always consult a doctor.
Following skin contact	:	Wash with soap and water.
5		Change contaminated, saturated clothing.
Following eye contact	:	In case of eye irritation consult an ophthalmologist.
<i>2 i</i>		Rinse immediately carefully and thoroughly with eye-bath or water.
Following ingestion	:	Never give anything by mouth to an unconscious person or a person with cramps.

		IF SWALLOWED: Rinse mouth.
		Do NOT induce vomiting.
		If swallowed: Call a POISON CENTER or physician if you feel unwell.
Self-protection of the first aider	:	First aider: Pay attention to self-protection!.

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

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

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

Notes for the doctor : Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media	:	Foam.
		Extinguishing powder.
		Carbon dioxide (CO2).
		Sand.
Unsuitable extinguishing media	:	Strong water jet.

5.2. Special hazards arising from the substance or mixture

- Formation of toxic gases is possible during heating or in case of fire.

5.3. Advice for firefighters

- Wear a self-contained breathing apparatus and chemical protective clothing.

5.4. Additional information

- Do not inhale vapors and fumes.
- Co-ordinate fire-fighting measures to the fire surroundings.
- Move undamaged containers from immediate hazard area if it can be done safely.
- Use caution when applying carbon dioxide in confined spaces. carbon dioxide can displace oxygen.
- Use water spray jet to protect personnel and to cool endangered containers.
- Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

- Use personal protection equipment.
- Remove persons to safety.
- Use appropriate respiratory protection.
- Provide adequate ventilation.

6.2. Environmental precautions

- Ensure that waste is collected and contained.
- In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
- Avoid release to the environment.
- Cover drains.
- Ensure all waste water is collected and treated via a waste water treatment plant.
- Do not allow to enter into soil/subsoil.
- Do not allow to enter into surface water or drains.
- Retain contaminated washing water and dispose it.
- Contain leaks or spills within cabinets with removable trays.

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6.3. Methods and material for containment and cleaning up

- Treat the recovered material as prescribed in the section on waste disposal.
- Collect in closed and suitable containers for disposal.
- Clean contaminated objects and areas thoroughly observing environmental regulations.
- Ventilate affected area.
- Collect spillage.
- Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
- Wipe up with absorbent material (eg. cloth, fleece).

6.4. Reference to other sections

- Safe handling: see section 7.
- Disposal: see section 13.
- Personal protection equipment: see section 8.

6.5. Additional information

Not available

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

- Avoid exposure obtain special instructions before use.
- Use only outdoors or in a well-ventilated area.

PROTECTIVE MEASURES

- Avoid contact with skin, eyes and clothes.
- Do not eat, drink or smoke when using this product.
- Use only in well-ventilated areas.
- If local exhaust ventilation is not possible or not enough, the entire work area must be ventilated by technical means.
- Provide adequate ventilation as well as local exhaustion at critical locations.
- Sewers and ducts must be protected against the entry of the product.
- Provide for retaining containers, eg. floor pan without outflow.
- Avoid breathing gas/fumes/vapour/spray.

Advices on general occupational hygiene

- Wash hands before breaks and after work.
- Remove contaminated, saturated clothing.
- Work in well ventilated zones or use proper respiratory protection.

7.2. Conditions for safe storage, including any incompatibilities

- Keep container tightly closed in a dry, cool, and well-ventilated place.
- Keep container in upright position in order to prevent leakage.

Requirements for storage rooms and vessels

- Ensure adequate ventilation of the storage area.
- Use isolated drainage to prevent discharge to soil.

Advice on joint storage

- Keep away from food, drink and animal feedingstuffs.

7.3. Specific end uses

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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8.1. Control parameters

Does not contain substances above concentration limits fixing an occupational exposure limit. Not available

8.2. Exposure controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. Fresh air (open windows and doors) is necessary.

Personal protection equipment



Eye/face protection	: Suitable eye protection: No data available	
Skin protection	: Hand protection: No data available	
	Body protection: Lab coat.	
Respiratory protection	: Respiratory protection necessary at: If technical exhaust or ventilation measures are not	
	possible or insufficient, respiratory protection must be worn.	
	Suitable respiratory protection apparatus: Wear respiratory protection.	
	Remark:	
	 The filter class must be suitable for the maximum contaminant concentration 	
	(gas/vapour/aerosol/particulates) that may arise when handling the product. If the	
	concentration is exceeded, self-contained breathing apparatus must be used.	
	 Observe the wear time limits as specified by the manufacturer. 	
	 Use only respiratory protection equipment with CE-symbol including four digit test numb 	er.

8.3. Additional information

Not available

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state: Colour: Odour: Odour threshold: pH: Melting point/freezing point: Initial boiling point and boiling range: Flash point: Evaporation rate: Flammability: Upper/lower flammability or explosive limits: Vapour pressure: Vapour pressure: Vapour density: Relative density: Solubility(ies): Partition coefficient: n-octanol/water (log	Liquid Not available Not available 7.4 Not available Not available Not available Not available Not available Not available Not available Not available Not available Not available
Partition coefficient: n-octanol/water (Log KOC):	
Auto-ignition temperature: Decomposition temperature: Viscosity:	Not available Not available Not available

Explosive properties: Oxidising properties:

Not available Not available

9.2. Other safety information

Not available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

10.7. Additional information

Not available.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Acute oral toxicity

The substance Dimethylarsinic acid (CAS: 75-60-5) is analogous to the substance Arsenic (CAS: 7440-38-2). Data for the substance Dimethylarsinic acid (CAS: 75-60-5) is not available. The data will therefore be specified for the substance Arsenic (CAS: 7440-38-2). 38-2).

Data for mixture

Not available

Substances

• arsenic (CAS : 7440-38-2)

Species	:	Rat
Sex	:	Not available
Guideline	:	Not available

Subendpoint	Operator =		Value	Unit	
LD50:			144	mg/kg bw	
Conclusion	: The substance is considered to be hightly toxic by the oral route.				

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11.2. Acute skin toxicity

Data for mixture

Not available

Substances

Not available

11.3. Acute inhalation toxicity

Data for mixture

Not available

Substances

Not available

11.4. Skin corrosion

Data for mixture

Not available

Substances

Not available

11.5. Eye damage

Data for mixture

Not available

Substances

Not available

11.6. Skin sensitisation

Data for mixture

Not available

Substances

• arsenic (CAS : 7440-38-2)

Species	:	Not available
Sex	:	Not available
Guideline	:	Not available
Exposure duration/value	:	Not available
Exposure duration/unit	:	Not available
	:	

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Concentration	ion : Not available		
Subendpoint		Value	Unit
-		-	-
Conclusion : No adverse effect observed (not sensitising)			

11.7. STOT RE

11.7. STOT RE
Data for mixture
Not available
Substances
Not available
11.8. STOT SE
Data for mixture
Not available
Substances
Not available 11.9. STOT RE
11.9. STOT RE
Data for mixture
Not available
Substances
Not available
11.10. Carcinogenicity
Data for mixture
Not available
Substances
Not available
11.11. Reproductive and Developmental Toxicity
Data for mixture
Not available

Substances

Not available

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11.12. Genotoxicity

Data for mixture

Not available

Substances

Not available

11.13. In vitro genotoxicity

Data for mixture

Not available

Substances

Not available

11.14. Respiratory sensitisation

Data for mixture

Not available

Substances

Not available

Additional information

Not available

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Toxic to aquatic life with long lasting effects.

The substance Dimethylarsinic acid (CAS: 75-60-5) is analogous to the substance Arsenic (CAS: 7440-38-2). Data for the substance

Dimethylarsinic acid (CAS: 75-60-5) is not available. The data will therefore be specified for the substance Arsenic (CAS: 7440-

38-2).

Acute aquatic toxicity

Substances

• <u>arsenic</u> (CAS: 7440-38-2)

Animals/category	:	Freshwater fish
Species	:	Not available
Test duration	:	6
Unit	:	days
Guideline	:	Not available

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Subendpoint		Value	U	nit
LC50:		15,98	m	ng/L
Remarks : Not a		available		
Animals/category	: Free	shwater fish		
Species	: Not	available		
Test duration	est duration : 7			
Unit	: day	S		
Guideline	: Not	available		

Subendpoint	Value	Unit
EC50/LC50	0,426-0,494	mg/L
Remarks : No	: Not available	

Chronic aquatic toxicity

Substances

• <u>arsenic</u> (CAS: 7440-38-2)		
Animals/category	:	Freshwater fish
Species	:	Not available
Guideline	:	Not available
Exposure duration/value	:	38
Exposure duration/unit	:	days

Subendpoint		Value	Unit	
EC10/LC10 or NOEC		2,13	mg/L	
Remarks : Not a		ot available		
Animals/category : Fresh		eshwater fish		
Species : Not a		ot available		
Guideline : Not a		ot available		
Exposure duration/value : 28		3		
Exposure duration/unit	: da	iys		

Subendpoint		Value	Unit
EC10/LC10 or NOEC		0,63	mg/L
Remarks	: Not av	ailable	

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

12.7. Additional ecotoxicological information

Not available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

- The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Waste treatment options

- Waste requiring special supervision.
- Dispose of waste according to applicable legislation.
- Delivery to an approved waste disposal company.
- Non-contaminated packages must be recycled or disposed of.
- Contaminated packing must be completely emptied and can be reused after proper cleaning.
- Packing which cannot be properly cleaned must be disposed of.
- Handle contaminated packages in the same way as the substance itself.
- Dispose of waste according to applicable legislation.

Remark

- For recycling, contact manufacturer.
- Collect the waste separately.
- Consult the appropriate authorities about waste disposal.
- Do not mix with other wastes.
- The waste is to be kept separate from other types of waste until its disposal.
- Concerning the waste it has to be checked, whether a transport authorisation is required.

SECTION 14: TRANSPORT INFORMATION

	Land transport (ADR/RID)	Inland waterway transport (ADN)	Sea transport (IMDG)	Air transport (ICAO- TI/IATA-DGR)
14.1. UN number	-	-	-	-
14.2. UN proper shipping name	-	-	-	-
14.3. Transport hazard class(es)				
Class or Division	-	-	-	-
Hazard label(s)				
14.4. Packing group	-	-	-	-

14.5. Environmental hazards

Not available

14.6. Special precautions for user

Not available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not available

14.8. Additional information

Not available

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

This SDS has been established in accordance with REACH regulation, including its amendments: REACH Regulation (EC) No 1907/2006. This SDS has been established in accordance with CLP regulation, including its amendments: CLP Regulation EC No. 1272/2008.

15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier. For this substance/mixture a chemical safety assessment has been elaborated. For this mixture, the relevant data of the Substances' Chemical safety assessment are integrated in the sections of the SDS.

15.3. Additional information

Not available

SECTION 16: OTHER INFORMATION

Creation date:	02/11/2020
Version date:	02/11/2020
Printing date:	19/11/2020

16.1. Indication of changes

Not applicable (first edition of the MSDS).

16.2. Abbreviations and acronyms

CAS: Chemical Abstract Service Number. IATA: International Air Transport Association. IMDG: International Maritime Dangerous Goods Code. DPD Dangerous Preparation Directive. UN number: United Nations number. No EC: European Commission Number. ADN/ADNR: Regulations concerning the transport of dangerous substances in barges on the waterways. ADR/RID: European Agreement concerning the International Carriage of Dangerous Goods by Road/Regulations concerning the international carriage of dangerous goods by rail. CLP: Classification, labeling and packaging. VPvB: very persistent and very bioaccumulative substances.

16.3. Key literature references and sources for data

No data available.

16.4. Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]

Classification of the mixture is in accordance with the evaluation method described in Regulation (EC) No 1272/2008.

16.5. Relevant R-, H- and EUH-phrases (Number and full text)

2.

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H410	Aquatic Chronic 1	Very toxic to aquatic life with long lasting effects.
H411	Aquatic Chronic 2	Toxic to aquatic life with long lasting effects.

16.6. Training advice

Refer to Sections 4, 5, 6, 7 and 8 of this safety data sheet.

16.7. Additional information

Not available

The information given in this Safety Data Sheet is based on our present knowledge and on european and national regulations. This Safety Data Sheet describes safety requirements relative to identified uses, it doesn't guarantee all the product properties particularly in the case of non identified uses. The product mustn't be used for any uses other than those identified under heading 1. Since the user's working conditions are not known by us, it is the responsability of the user to take all necessary measures to comply with legal requirements for specific uses and avoid negative health effects.