

Safety Data Sheet

Elongation Buffer (EL)

DNASCRIPT

According to the Inspection Procedures for the Hazard Communication Standard (HCS 2012) Regulation

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, Inc
Street: 279 East Grand Avenue
Postal code/City: Suite 440 South San Francisco CA 94080
Country: United States
Telephone: 650.457.0846
Website: www.dnascript.com
E-mail: No data available

1.4. Emergency Telephone Number

U.S: In case of emergency, call American Association of Poison Control Centers 800-222-1222 (US)

SECTION 2: HAZARDS IDENTIFICATION


2.1. Classification of the substance or mixture

Hazards identification

Classification	Hazard statements (H)	
Acute Tox. 4	H302	Harmful if swallowed
Acute Tox. 4	H332	Harmful if inhaled.

2.2. Label elements

Labelling

Hazard pictograms	
Signal word	Warning
Product identifiers	-
Hazard Statements	H302 - Harmful if swallowed H332 - Harmful if inhaled.
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	P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P330 - Rinse mouth.
Precautionary Statements - Storage	-
Precautionary Statements - Disposal	P501 - Dispose of contents/container in accordance with applicable local/regional/national/international regulations

Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Substance	C (%)	Classification	Specific concentration limits	Note
dimethylarsinic acid CAS N°:75-60-5 EC N°:200-883-4 IDX N°:	1.0% ≤C≤ 20.0%	H301: Toxic if swallowed. H331: Toxic if inhaled.	-	-

3.2. Mixtures

No data available.

3.3. Remark

Full text of H- phrases: 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. 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. Change contaminated, saturated clothing.
Following eye contact	:	In case of eye irritation consult an ophthalmologist. 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.
- Contain leaks or spills within cabinets with removable trays.

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.
- 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 exhaust at critical locations.
- 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.

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

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.

8.3. Additional information

Not available

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Not available
Odour:	Not available
Odour threshold:	Not available
pH:	7,4
Melting point/freezing point:	Not available
Initial boiling point and boiling range:	Not available
Flash point:	Not available
Evaporation rate:	Not available
Flammability:	Not available
Upper/lower flammability or explosive limits:	Not available
Vapour pressure:	Not available
Vapour density:	Not available
Relative density:	Not available
Solubility(ies):	Not available
Partition coefficient: n-octanol/water (Log KOC):	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available
Explosive properties:	Not available
Oxidising properties:	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).

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 highly toxic by the oral route.

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
Concentration	:	Not available

Subendpoint	Value	Unit
-	-	-

Conclusion : No adverse effect observed (not sensitising)

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

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

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

Carcinogenicity

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**

- **arsenic (CAS: 7440-38-2)**

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

Subendpoint	Value	Unit
LC50:	15,98	mg/L

Remarks : Not available

Animals/category : Freshwater fish
 Species : Not available
 Test duration : 7
 Unit : days
 Guideline : Not available

Subendpoint	Value	Unit
EC50/LC50	0,426-0,494	mg/L

Remarks : Not available

Chronic aquatic toxicity

Substances

- arsenic (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 available

Animals/category : Freshwater fish
 Species : Not available
 Guideline : Not available
 Exposure duration/value : 28
 Exposure duration/unit : days

Subendpoint	Value	Unit
EC10/LC10 or NOEC	0,63	mg/L

Remarks : Not available

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 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 HazCom 2012.

Not available

15.2. Chemical Safety Assessment

Not available

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.
 DOT: Department of Transportation.
 HCS/HazCom: Hazard Communication.

16.3. Key literature references and sources for data

No data available.

16.4. The classification of the mixture is in accordance with the evaluation method described in HazCom 2012

The classification of the mixture is in accordance with the evaluation method described in HazCom 2012.

16.5. The classification of the mixture is in accordance with the evaluation method described in the GHS

H301	Acute Tox. 3 ORAL	Toxic if swallowed.
H302	Acute Tox. 4 ORAL	Harmful if swallowed
H331	Acute Tox. 3 INHALATION	Toxic if inhaled.
H332	Acute Tox. 4 INHALATION	Harmful if inhaled.

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 responsibility of the user to take all necessary measures to comply with legal requirements for specific uses and avoid negative health effects.