

# Lysis Buffer Stock Solution (EliGene® Viral RNA/DNA FAST Isolation Kit, 409100)

Version: SDSLysisBuffer-12052023EN Revision Date: 12.05.2023 Page 1/11

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

1.1 Product information

Commercial Product Name: Lysis Buffer Stock Solution (EliGene® Viral RNA/DNA FAST Isolation

Kit, 409100)

REACH No.: This product is a mixture. REACH Registration Number see section 3.

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

Use of the Substance/Mixture: Laboratory chemicals not in a nanoform.

1.3 Details of the supplier of the safety data sheet

Company: ELISABETH PHARMACON, spol. s r.o.

Rokycanova 4437/5, 615 00 Brno,

Czech Republic

Telephone: +420 542 213 851
Fax: +420 542 213 827
E-mail: info@elisabeth.cz

1.4 Emergency telephone number

Centre for Detoxification Prague: +420 224 91 92 93/ +420 224 91 54 02

## **SECTION 2: HAZARDS IDENTIFICATION**

#### 2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids Category 3 H226 Flammable liquid and vapor Accute toxicity, Oral: Category 4 H302 Harmful if swallowed.

Skin irritation: Category 2 H315 Causes serious skin irritation.
Serious eye damage: Category 1 H319 Causes serious eye irritation.
Short-term aquatic hazard: Category 1 H400 Very toxic to aquatic life

Long-term aquatic hazard: Category 2 H411 Toxic to aquatic life with long-lasting

effects

#### 2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms:



Signal Word: Danger

Hazard Statements: H226 Flammable liquid and vapor.

H302 Harmful if swallowed. H315 Causes skin irritation.

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long-lasting effects.



# Lysis Buffer Stock Solution (EliGene® Viral RNA/DNA FAST Isolation Kit, 409100)

Version: SDSLysisBuffer-12052023EN Revision Date: 12.05.2023 Page 2/11

Precautionary statements (P statements)

P210 Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.

P273 Avoid release to the environment.

P280 Wear protective gloves/ eye protection/ face protection.

P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.

P302 + P352 IF ON SKIN: Wash with plenty of water.

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

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 higher or having endocrine disruptor properties.

## **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

#### 3.1 Mixtures

Hazardous components

| Chemical Name         | CAS- No.                   | Concentration (%) |
|-----------------------|----------------------------|-------------------|
|                       | EC-No. Registration number |                   |
| Guanidium thiocyanate | 593-84-0                   | >= 30 - < 50      |
| Tergitol              | 84133-50-6                 | >= 1 - < 10       |
| 2-Propanol            | 67-63-0                    | >= 5 - < 20       |

The actual concentration is withheld as a trade secret.

# **SECTION 4: FIRST AID MEASURES**

#### 4.1 Description of first aid measures

General advice: Move out of dangerous area.

Show this material safety data sheet to the doctor in attendance.

If inhaled: If unconscious, place in the recovery position and seek medical advice.

If symptoms persist, call a physician.

In case of skin contact: Wash off immediately with soap and plenty of water.

Consult a physician.

In case of eye contact: Immediately flush eye(s) with plenty of water.

Remove contact lenses. Protect unharmed eye.

Rinse thoroughly with plenty of water for at least 15 minutes and consult a

physician.

If swallowed: If accidentally swallowed obtain immediate medical attention. Rinse mouth

with water.

Never give anything by mouth to an unconscious person. Consult a physician.

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

Symptoms and effects: Harmful if swallowed.

Causes serious eye damage. Causes serious skin irritation.

4.3 Indication of any immediate medical attention and special treatment needed

according to Regulation (EC) No. 1907/2006



# Lysis Buffer Stock Solution (EliGene® Viral RNA/DNA FAST Isolation Kit, 409100)

Version: SDSLysisBuffer-12052023EN Revision Date: 12.05.2023 Page 3/11

No information available

#### **SECTION 5: FIRE-FIGHTING MEASURES**

# 5.1 Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon

dioxide

## 5.2 Specific hazards during fire fighting

Do not allow run-off from firefighting to enter drains or water courses. Exposure to decomposition products may be a hazard to health.

## 5.3 Hazardous combustion products

Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides.

Combustible.

#### 5.4 Further information

In the event of fire and/or explosion do not breathe fumes. Use a water spray to cool fully closed containers.

Special protective equipment for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

#### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

## 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Use personal protective equipment.

Ensure adequate ventilation.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Remove all sources of ignition. Evacuate personnel to safe areas.

Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas

# 6.2 Environmental precautions

Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

# 6.3 Methods and material for containment and cleaning up

Methods for cleaning up: Contain spillage, and then collect with non-combustible

absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to

local / national regulations (see section 13).

# 6.4 Reference to other sections

For personal protection see section 8.

### **SECTION 7: HANDLING AND STORAGE**

# 7.1 Precautions for safe handling

Advice on safe handling: Work under the hood. Do not inhale a substance/mixture. Avoid

the generation of vapors/aerosols.



# Lysis Buffer Stock Solution (EliGene® Viral RNA/DNA FAST Isolation Kit, 409100)

Version: SDSLysisBuffer-12052023EN Revision Date: 12.05.2023 Page 4/11

Hygiene measures: Immediately change contaminated clothing. Apply preventive skin

protection. Wash hands and face after working with substances.

For precautions see section 2.2.

# 7.2 Conditions for safe storage, including any incompatibilities

Storage conditions: Keep the container tightly closed in a dry and well-ventilated place.

Store in a cool place. Tightly closed. Keep locked up or in an area

accessible only to qualified or authorized persons.

Storage stability: Recommended storage temperature

15 - 25 °C

Storage class: Storage class (TRGS 510): 10: Combustible liquids

7.3 Specific end use(s)

Specific 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

## Ingredients with workplace control parameters

| Components | CAS-No.  | Value type | Control       | Basis     |
|------------|----------|------------|---------------|-----------|
|            |          | (Form of   | parameters /  |           |
|            |          | exposure)  | Permissible   |           |
|            |          |            | concentration |           |
| 2-propanol | 67-63-02 | TWA        | 200 ppm       | ACGIH     |
|            |          | STEL       | 400 ppm       | ACGIH     |
|            |          | ST         | 500 ppm       | NIOSH REL |
|            |          |            | 1,225 mg/m3   |           |
|            |          | TWA        | 400 ppm       | NIOSH REL |
|            |          |            | 980 mg/m3     |           |
|            |          | TWA        | 400 ppm       | OSHA Z-1  |
|            |          |            | 980 mg/m3     |           |
|            |          | STEL       | 500 ppm       | OSHA PO   |
|            |          |            | 1,225 mg/m3   |           |
|            |          | TWA        | 400 ppm       | OSHA PO   |
|            |          |            | 980 mg/m3     |           |

# **Biological occupational exposure limits**

| Components | CAS-No.  | Control    | Biological | Sampling time          | Permissible   | Basis        |
|------------|----------|------------|------------|------------------------|---------------|--------------|
|            |          | parameters | specimen   |                        | concentration |              |
| 2-propanol | 67-63-02 | Acetone    | Urine      | End of shift at end of | 40 mg/l       | ACGIH<br>BEI |
|            |          |            |            | workweek               |               | 52.          |

# 8.2 Exposure controls

This file is owned by ELISABETH PHARMACON, spol. s r. o., It is issued for publication. Downloaded:  $15.05.2024\ 03:15$  online user



# Lysis Buffer Stock Solution (EliGene® Viral RNA/DNA FAST Isolation Kit, 409100)

Version: SDSLysisBuffer-12052023EN Revision Date: 12.05.2023 Page 5/11

Personal protective equipment

Eye protection: Safety glasses with side shields conforming to EN166 Use equipment

for eye protection tested and approved under appropriate

government standards such as NIOSH (US) or EN 166(EU).

Hand protection: The choice of an appropriate glove does not only depend on its

material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break-through times, and of special workplace conditions (mechanical strain, duration of

contact). Protective gloves complying with EN 374.

Skin and body protection: Choose body protection according to the amount and concentration

of the dangerous substance at work. Footwear protecting against chemicals.

Respiratory protection: For nuisance exposures use type P95 (US) or type P1 (EU EN 143)

particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate

government standards such as NIOSH (US) or CEN (EU).

# **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

## 9.1 Information on basic physical and chemical properties

a) Physical state Liquid
b) Color Clear

c) Odor Äalcohol-like

d) Melting point/freezing point No data available

e) Initial boiling point and boiling range ca. 176 - 212  $^{\circ}$ F / 80 - 100  $^{\circ}$ C

f) Flammability (solid, gas)

R) data available
g) Upper/lower flammability or explosive limits
No data available
h) Flashpoint
108.5 °F / 42.5 °C
i) Autoignition temperature
No data available
j) Decomposition temperature
No data available

k) pH 6.69 - 6.72 (64 - 72 °F / 18 - 22 °C)

I) Viscosity Viscosity, kinematic:

No data available

Viscosity, dynamic:

No data available

m) Water solubility at 20 °C soluble

n) Partition coefficient: n-octanol/water

No data available
o) Vapor pressure

No data available
p) Density

No data available
Relative density

No data available

according to Regulation (EC) No. 1907/2006



# Lysis Buffer Stock Solution (EliGene® Viral RNA/DNA FAST Isolation Kit, 409100)

Version: SDSLysisBuffer-12052023EN Revision Date: 12.05.2023 Page 6/11

q) Relative vapor density
 No data available
 r) Particle characteristics
 s) Explosive properties
 No data available

t) Oxidizing properties none

#### 9.2 Other information

No data available

#### **SECTION 10. STABILITY AND REACTIVITY**

## 10.1 Reactivity

No decomposition if stored and applied as directed.

### 10.2 Chemical stability

No decomposition if stored and applied as directed.

#### 10.3 Possibility of hazardous reactions

Hazardous reactions: Stable under recommended storage conditions.

Hazardous decomposition products formed under fire conditions.

Vapors may form an explosive mixture with air.

Keep away from oxidizing agents, and acidic or alkaline products.

10.4 Conditions to avoid

Conditions to avoid: Heat, flames, and sparks.

10.5 Incompatible materials

Materials to avoid: No data available.

# 10.6 Hazardous decomposition products

Hazardous decomposition products: No decomposition if stored and applied as directed.

# **SECTION 11. TOXICOLOGICAL INFORMATION**

#### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

# **Acute toxicity**

Not classified based on available information.

**Product:** 

Acute oral toxicity: Remarks: No data available Remarks: No data available Remarks: No data available Remarks: No data available

**Components:** 

guanidine thiocyanate:

Acute oral toxicity: LD50 Oral (Rat): 1,120 mg/kg

2-propanol:

Acute oral toxicity: LD50 Oral (Rat): 5,045 mg/kg
Acute dermal toxicity: LD50 Dermal (Rabbit): 12,800 mg/kg

according to Regulation (EC) No. 1907/2006



# Lysis Buffer Stock Solution (EliGene® Viral RNA/DNA FAST Isolation Kit, 409100)

Version: SDSLysisBuffer-12052023EN Revision Date: 12.05.2023 Page 7/11

### Skin corrosion/irritation

Causes skin irritation.

**Product:** 

Remarks: May irritate skin.

Components: isopropanol:

Species: Rabbit

Result: Mild skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

**Product:** 

Remarks: May cause irreversible eye damage.

Components: isopropanol:

Species: Rabbit Result: Eye irritation

Exposure time: 24 h

# Respiratory or skin sensitization

#### Skin sensitization

Not classified based on available information.

# Respiratory sensitization

Not classified based on available information.

**Product:** 

Remarks: No data available

# Germ cell mutagenicity

Not classified based on available information.

## Carcinogenicity

Not classified based on available information.

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list

of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a

known or anticipated carcinogen by NTP.

## Reproductive toxicity

Not classified based on available information.

## STOT-single exposure

Not classified based on available information.

# **Components:**

according to Regulation (EC) No. 1907/2006



# Lysis Buffer Stock Solution (EliGene® Viral RNA/DNA FAST Isolation Kit, 409100)

Version: SDSLysisBuffer-12052023EN Revision Date: 12.05.2023 Page 8/11

isopropanol:

Assessment: May cause drowsiness or dizziness.

**STOT-repeated exposure** 

Not classified based on available information.

**Aspiration toxicity** 

Not classified based on available information.

**Further information** 

**Product:** 

Remarks: Solvents may degrease the skin.

#### 11.2 Information on other hazards

**Endocrine disrupting properties** 

#### **Product:**

Assessment: The substance/mixture does not contain components considered to have endocrine-disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Other dangerous properties cannot be excluded.

Handle in accordance with good industrial hygiene and safety practices.

## **SECTION 12. ECOLOGICAL INFORMATION**

12.1 Toxicity

Toxicity to fish:

Toxicity to algae:

Toxicity to bacteria:

No data available

No data available

Components: isopropanol:

Toxicity to fish: LC50 (Pimephales promelas (fathead minnow)): 9,640 mg/l

Exposure time: 96 h

Toxicity to algae/aquatic plants: EC50 (Desmodesmus subspicatus (green

algae)): 2,000 mg/l Exposure time: 72 h

12. 2 Persistence and degradability

**Components:** 

guanidine thiocyanate:

Biodegradability: Method: OECD Test Guideline 301C

Remarks: According to the results of tests of biodegradability this product is not readily biodegradable.

12.3 Bioaccumulative potential

**Product:** 

Bioaccumulation : Remarks: No data available

according to Regulation (EC) No. 1907/2006



# Lysis Buffer Stock Solution (EliGene® Viral RNA/DNA FAST Isolation Kit, 409100)

Version: SDSLysisBuffer-12052023EN Revision Date: 12.05.2023 Page 9/11

#### Components:

## guanidine thiocyanate:

Partition coefficient: noctanol/water: log Pow: ca. -1.7 (68 °F / 20 °C)

## 12.4 Mobility in soil

No data available

## 12.6 Endocrine-disrupting properties

Assessment: The substance/mixture does not contain components considered to have endocrinedisrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## 12.7 Other adverse effects

#### **Product:**

Ozone-Depletion Potential:

Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section

602 Class I Substances

Remarks: This product neither contains nor was manufactured with a Class I or Class II ODS as

defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A)

Additional ecological information: No data available

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

# 13.1 Waste treatment methods

Waste from residues: Send to a licensed waste management company. Dispose of hazardous waste

in compliance with local and national regulations.

Contaminated packaging: Dispose of as an unused product.

## **SECTION 14. TRANSPORT INFORMATION**

# 14.1 UN number or ID number

ADR/RID: UN 1760, UN 1987 IMDG: UN 1760, UN 1987 IATA: UN 1760, UN 1987

## 14.2 UN proper shipping name

ADR/RID: CORROSIVE LIQUID, N.O.S. (Guanidinium thiocyanate) solution

ALCOHOLS, N.O.S. (2-propanol)

IMDG: CORROSIVE LIQUID, N.O.S. (Guanidinium thiocyanate) solution

ALCOHOLS, N.O.S. (2-propanol)

CORROSIVE LIQUID, N.O.S. (Guanidinium thiocyanate) solution IATA:

> ALCOHOLS, N.O.S. (2-propanol) Labels: Flammable Liquids

# 14.3 Transport hazard class(es)

ADR/RID: 3,8 IATA: 3,8 IMDG: 3,8

14.4 Packing group

ADR/RID: III IATA: III IMDG: III

according to Regulation (EC) No. 1907/2006



# Lysis Buffer Stock Solution (EliGene® Viral RNA/DNA FAST Isolation Kit, 409100)

Version: SDSLysisBuffer-12052023EN Revision Date: 12.05.2023 Page 10/11

Packing instruction (cargo aircraft): 366
Packing instruction (passenger aircraft): 355

#### 14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

#### 14.6 Special precautions for user

For personal protection see section 8.

#### 14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

#### **SECTION 15. REGULATORY INFORMATION**

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. Refer to component SDS

## **15.2 Chemical Safety Assessment**

For this product, a chemical safety assessment was not carried out

# **SECTION 16. OTHER INFORMATION**

### Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC -Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw -Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS -Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 – Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL -Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR -(Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI – Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States);

according to Regulation (EC) No. 1907/2006



# Lysis Buffer Stock Solution (EliGene® Viral RNA/DNA FAST Isolation Kit, 409100)

Version: SDSLysisBuffer-12052023EN Revision Date: 12.05.2023 Page 11/11

UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

#### **Further information**

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product regarding appropriate safety precautions. It does not represent any guarantee of the properties of the product. Elisabeth Pharmacon company shall not be held liable for any damage resulting from handling or from contact with the above product.

Version: 250723-02 Page **11** of **11**