



### SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization : Mixtures

Description : Mixture of the substances listed below with nonhazardous additions.

#### Buffer's Components in Water:

Reagent	CAS#	Concentration, %
Tris-HCl	77-86-1	< 1
Magnesium chloride	7786-30-3	< 0.01
Potassium chloride	7447-40-7	< 0.01
Dithiothreitol (DTT)	3483-12-03	< 0.01
ATP	987-65-5	< 0.01
Glycerol	56-81-5	< 50

#### Components:

Glycerol	CAS: 56-81-5	EI;ECS: 200-289-5	≤ 50 %
water	CAS: 7732-18-5	EI;ECS: 231-791-2	25-50 %

**Other components** are not dangerous or their concentrations do not exceed the limits specified in the EU directive 1999/45/EC.

### SECTION 4. FIRST AID MEASURES

#### After skin contact

Wash skin with water and soap and rinse thoroughly. Remove contaminated clothing. Get medical attention if irritating occurs.

#### After eye contact

Rinse opened eyes for several minutes under running water. Get medical attention if eyes become irritating.

#### After swallowing (ingestion)

Rinse mouth. Drink plenty of water. Get medical attention if irritating or symptoms occur.

#### After inhalation

If inhaled, remove to fresh air. If breathing is difficult, call a physician.

### SECTION 5. FIRE FIGHTING MEASURES

#### Extinguishing media

Water spray. Carbon dioxide, dry chemical powder or appropriate foam.

#### Special firefighting procedures

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

#### Unusual fire and explosions hazards

Emit toxic fumes under fire conditions.

#### Prevent contact with skin and eyes.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

Wear self-contained breathing apparatus, chemical safety goggles, rubber boots, and chemical resistant gloves. Wear disposable coveralls and discard them after use.

### Environmental precautions

Do not allow entering sewers, surfaces or ground water.

### Measures for cleaning / collecting

Collect spilled liquid with liquid-binding material or inert absorbent and place it in container for disposal. Wash spill site after material pickup is complete.

## SECTION 7. HANDLING AND STORAGE

### Handling:

No special measures necessary. Good laboratory technique should be used when handling. Keep away from heat.

### Storage:

No special measures necessary. Store at -20°C. Keep container tightly closed.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION □

### Engineering Controls:

Safety shower and eye bath. Mechanical exhaust required.

### Exposure limits Eye protection Skin protection:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

### Personal Protection:

Safety glasses. Lab coat. Vapor respirator. Be sure to use an approved/ certified respirator or equivalent. Gloves.

### General Hygiene Measures:

Wash thoroughly after handling. Wash contaminated clothing before use.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Liquid.
<b>Color</b>	Clear Colorless.
<b>Odor</b>	Odorless.
<b>Melting Point</b>	20 °C.
<b>Boiling Point</b>	182 °C.
<b>Flash point</b>	> 392 F, > 200 °C.
<b>Explosive properties</b>	No data available.
<b>Vapor pressure</b>	< 1 MMHG @ 20 °C.

## SECTION 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable.
<b>Hazardous polymerization</b>	Will not occur
<b>Materials to Avoid</b>	Strong oxidizing agents, strong bases.
<b>Hazardous Decomposition Products:</b>	Carbon Monoxide, Carbon Dioxide
<b>Protect from heat and moisture</b>	

## SECTION 11. TOXICOLOGICAL INFORMATION

<b>Eye Contact:</b>	Irritating to eyes
<b>Skin Contact</b>	Irritating to skin.
<b>Multiple Routes</b>	May be harmful by inhalation, ingestion, or skin absorption

Materials may be irritating to mucous membranes and upper respiratory tract.

**Chronic Effects** : Target Organs, Kidney

Signs and Symptoms of Exposure : Prolonged exposure can cause : Nausea, headache and vomiting

To the best of our knowledge, the properties have not yet been thoroughly investigated.

## SECTION 12. ECOLOGICAL INFORMATION

Data not yet available

## SECTION 13. DISPOSAL CONSIDERATIONS

Contact a licensed professional waste disposal service to dispose of this material.

Observe all federal, state and local environmental regulations

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

## SECTION 14. TRANSPORT INFORMATION

Contact ELPIS Biotech, Inc. Company for Transportation Information.

## SECTION 15. REGULATORY INFORMATION

Korea regulatory information : None of the ingredients listed.

US Classification and Label text

US Statements : Caution: Avoid contact and inhalation

United States regulatory information

SARA Listed : No

Canada regulatory information

WHMIS Classification : This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: No

NDSL: No

## **SECTION 16. OTHER 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.

ELPIS Biotech Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

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