

## Safety Data Sheet

Classification in accordance with Global Harmonizing System (GHS)

### SECTION 1: Identification of The Substance/Mixture and of the Company Undertaking

#### 1.1 Product Identifier

**Product Name** T7 Scribe Enzyme Solution  
**Product Number** Component of Kit

#### 1.2 Recommended Use and Restrictions on Use

Avoid concentration of components by evaporation. This product is a laboratory reagent for research and development use only.

#### 1.3 Details of the Supplier of the Safety Data Sheet

Company	CELLSCRIPT™, LLC.
Address	726 Post Rd.
City, State, Zip Code	Madison, WI 53713
Country	USA
Telephone Number	888-826-5586
Email Address	customerservice@cellscript.com
Emergency Telephone Number	1-608-442-6484 Monday to Friday 9 am-5 pm CST

### SECTION 2: Hazard(s) Identification

#### 2.1 Classification of the Substance or Mixture

This product with given component concentrations is not considered hazardous.

#### 2.2 Hazards not otherwise classified

This product as provided is not considered hazardous.

## SECTION 3: Composition / Information on Ingredients

### 3.1 Components of Substance or Mixture

Chemical name	Formula	CAS number	EC number	Concentration
T7 RNA Polymerase	NA	9014-24-8	232-756-4	150 U/ $\mu$ l
Glycerol	C <sub>3</sub> H <sub>5</sub> (OH) <sub>3</sub>	56-81-5	200-289-5	50%
2-amino-2-(hydroxymethyl)-1,3-propanediol	C <sub>4</sub> H <sub>11</sub> NO <sub>3</sub>	77-86-1	201-064-4	50 mM
Sodium Chloride	NaCl	7647-14-5	231-598-3	0.1 M
Dithiothreitol (DTT)	C <sub>4</sub> H <sub>10</sub> O <sub>2</sub> S <sub>2</sub>	3483-12-3	222-468-7	1 mM
Ethylenediaminetetraacetic acid (EDTA) disodium dihydrate	C <sub>10</sub> H <sub>14</sub> N <sub>2</sub> Na <sub>2</sub> O <sub>8</sub> •2H <sub>2</sub> O	6381-92-6	205-358-3	0.1 mM
Triton-X100	C <sub>16</sub> H <sub>26</sub> O <sub>2</sub>	9002-93-1	925-964-8	0.1%

**Impurities:** Not known.

## SECTION 4: First Aid Measures

### 4.1 Description of first aid measures

**Eye:** Gently flush with water, remove contact lenses, if present, hold eye lids open and flush eye with plenty of water (or buffered saline eye wash) for at least 15 minutes. If eye irritation occurs, get medical advice/attention.

**Skin:** Remove contaminated clothing and wash before reuse. Gently wash the contaminated area with plenty of soap and water for at least 15 minutes. If skin irritation or rash develops, get medical advice/attention.

**Inhalation:** Move person to fresh air. If not breathing clear airway and start cardiopulmonary resuscitation (CPR), avoid mouth-to-mouth; give artificial respiration and get medical attention. If respiratory irritation, dizziness, nausea occurs, get medical advice/attention.

**Ingestion:** Rinse mouth with water. Do not induce vomiting. Consult a physician.

### 4.2 Most important symptoms and effects

ACUTE No data available  
CHRONIC No data available

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

No data available

## SECTION 5: Fire Fighting Measures

Suitable extinguishing media:	Use water spray, alcohol resistant foam, dry chemical or carbon dioxide where appropriate
Unsuitable extinguishing media:	No Data Available.
Special hazards arising from mixture:	Carbon Oxides, Nitrogen Oxides, Sodium Oxides, and sulfur oxide gas may be produced under fire conditions.
Advice for firefighters:	Wear self-contained breathing apparatus and appropriate PPE while extinguishing the fire.

## SECTION 6: Accidental Release Measures

### 6.1 Personal precautions and protective equipment (PPE) and emergency procedures.

#### *Personal precautions and protective equipment (PPE):*

Depending on the extent of release, consider the need for trained firefighters/ emergency responders with adequate PPE for cleaning up. Keep unnecessary people away. Wear proper PPE. Do not touch or walk through spilled material. Ensure adequate ventilation.

#### *Environmental precautions:*

Prevent spills from entering storm sewers, drains or waterways. Prevent release to the environment.

#### *Methods and material for containment and cleaning up.*

How to contain spill:	Absorb onto inert material (sand or absorbent paper).
Cleaning-up methods:	Shovel/sweep up debris and store in a sealed plastic container for disposal.

Reference to other sections: See section 8 for further information on protective clothing and equipment, see section 13 for advice on waste disposal.

## SECTION 7: Handling and Storage

### 7.1 Safe handling

Precautions for safe handling:	Use appropriate personal protective equipment. Do not get in eyes or on skin, breathe vapors or mists. Ensure good ventilation. Remove contaminated clothing and protective equipment when leaving work areas.
General hygiene advice:	Use good industrial hygiene and safety practices. Wash hands before breaks, in use, and at the end of the workday.
Measures to prevent fire:	Not available

Measures to prevent aerosol/dust generation: Not available  
Measures to protect the environment: Not available

## 7.2 Conditions for safe storage, including any incompatibilities.

Technical measures and storage conditions: Store at -20°C in a freezer without a defrost cycle.  
Packaging materials: Store in original container.  
Requirements for storage rooms and vessels: Not available

## SECTION 8: Exposure controls/personal protection

### 8.1 Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
Glycerol (CAS 56-81-5)	TWA	USA	5 mg/m <sup>3</sup> , mist, respirable fraction  15 mg/m <sup>3</sup> , mist, total particulate	Cal/OSHA PEL

### 8.2 Engineering controls

Safety shower, eye wash station and ventilation systems.

### 8.3 Personal protection equipment

Eye/face protection: Safety glasses with side shields or goggles approved by government standards such as NIOSH (US), CEN (EU) and WHMIS (CA).  
Skin/body protection: Wear lab coat.  
Hand protection: Latex, nitrile or rubber gloves should be worn when handling substance.  
Respiratory protection: Use in a well ventilated area. In case of insufficient ventilation, respirators should be used that have been tested and approved by appropriate government standards such as NIOSH.

### 8.4 General health & safety measures

Use clean laboratory practices and personal protection equipment

### 8.5 Environmental exposure controls

Do not let product enter drains.

## SECTION 9: Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Appearance/color	Clear
Odor:	Odorless
Odor threshold:	None
pH:	Not available
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
Lower flammability/explosive limit:	Not available
Upper flammability/explosive limit:	Not available
Vapor pressure:	Not available
Vapor density:	Not available
Relative density:	Not available
Solubility:	Water soluble
Partition coefficient: n-octanol/water:	Unknown
Auto-ignition temperature:	Unknown
Decomposition temperature:	Unknown
Viscosity:	Unknown
Explosive properties:	Unknown
Oxidizing properties:	Unknown
Other information:	Not available

## SECTION 10: Stability and Reactivity

Reactivity:	No data available.
Chemical stability:	The product is stable under normal storage and usage conditions.
Possibility of hazardous reactions:	Under recommended conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid:	Avoid concentration of liquid mixture to solids.
Incompatible materials:	Strong oxidizing agents, bases, alkali metals, reducing agents
Hazardous decomposition products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological Information

Likely routes of exposure: Inhalation, ingestion, eye and skin contact.

### 11.1 Acute effects

Eye: May cause irritation  
Skin: May cause irritation  
Inhalation: May cause irritation to mucous membranes and upper respiratory tract.  
Ingestion: May be harmful  
Toxicity: Not available

Skin corrosion/irritation: Not available  
Serious eye damage/irritation: Not available  
Respiratory or skin sensitization: Not available  
STOT-single exposure: Not available  
Chronic health effects: Not available  
Carcinogenicity: Not available  
Germ cell mutagenicity: Not available  
Reproductive toxicity: Not available  
Developmental: Not available  
Fertility: Not available  
STOT-repeated exposure: Not available  
Aspiration hazard: Not available  
Other information: None

**IARC** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by the IARC.

**OSHA** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by the OSHA.

**NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by the NTP.

## SECTION 12: Ecological Information

### 12.1 Ecotoxicity

Acute toxicity: Not available  
Chronic toxicity: Not available  
Eco/aquatic toxicity: Not available

## 12.2 Persistence and Degradability

Abiotic degradation:	Not available
Physical- and photo-chemical elimination:	Not available
Biodegradation:	Not available
Bioaccumulative potential:	Not available

## 12.3 Biological oxygen demand

Theoretical oxygen demand at 10 ppm:	Not available
Chemical oxygen demand at 10 ppm:	Not available
Biological oxygen demand-5 at 10 ppm:	Not available

## 12.4 Known or predicted distribution to environmental compartments

Surface tension:	Not available
Absorption/desorption:	Not available
Mobility in soil:	Not available

## 12.5 Results of PBT and vPvB assessment

PBT results:	Not available
PvB results:	Not available

## 12.6 Other adverse effects

Additional information:	No known significant effects or critical hazards.
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## SECTION 13: Disposal Considerations

### 13.1 Waste treatment methods

Product/packaging disposal:	Dispose of material in accordance with all federal, state, and local regulations. Use a licensed professional waste disposal service to dispose of this product.
Waste codes/waste designations according to LoW:	Unknown
Waste treatment-relevant information:	Dispose of material in accordance with all federal, state, and local regulations.
Sewage disposal-relevant information:	Prevent material from entering drains, sewer and waterways.
Other disposal recommendations:	None

## SECTION 14: Transport Information

This product is not regulated by US Department of Transportation (DOT), ADR/RID (cross border) IMDG and IATA/ICAO.

UN number:	Not classified
UN proper shipping name:	Not classified
Transport hazard class(es):	Not classified
Packing group:	Not classified
Environmental hazards:	Not available
Special precautions for user:	Do not transport until safety precautions have been read and understood.

## SECTION 15: Regulatory Information

### 15.1 Occupational Safety and health Administration (OSHA) Hazards

Not listed

### 15.2 SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### 15.3 SARA 313 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

### 15.4 SARA311/312 Hazards

See section 2 for more information.

### 15.5 California Proposition 65

This product does not contain any chemicals known to the State of California to cause birth defects or other reproductive harm.

### 15.6 Pennsylvania Right to Know Components

Glycerol (CAS# 56-81-5): Present

### 15.7 New Jersey Right to Know Components

Glycerol (CAS# 56-81-5): Present

### 15.8 United States of America Toxic Substances Control Act (TSCA) List

All ingredients are listed in the TSCA inventory, except EDTA disodium dihydrate. This product is for research use only.

### 15.9 Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

All ingredients are listed except RNA polymerase.

### 15.10 European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified chemical Substances (ELINCS), and No Longer Polymers (NLP)

All ingredients are listed.



## **SECTION 16: Other Information**

### **16.1 Disclaimer**

The information provided on the SDS is the most accurate information to the best knowledge of CELLSCRIPT, LLC. at this time. The information provided within serves the purpose of guidance for safe handling, use, processing storage, transportation, disposal, and release. This document should not be considered as a warranty or quality specification. The information relates only to the specific material designated and is not valid when used in combination with other materials or within a process. CELLSCRIPT, LLC. assumes no liability for damage resulting from handling or contact with this product.

### **16.2 Document Revision**

Last Revision Date: 14JAN2021

## Safety Data Sheet

Classification in accordance with Global Harmonizing System (GHS)

**Note: This product is deemed non-hazardous**

### SECTION 1: Identification of The Substance/Mixture and of the Company Undertaking

#### 1.1 Product Identifier

**Product Name** Scriptguard™ RNase Inhibitor  
**Product Number** C-SRI6310K. Also a component of kit.

#### 1.2 Recommended Use and Restrictions on Use

Avoid concentration of components by evaporation. This product is a laboratory reagent for research and development use only.

#### 1.3 Details of the Supplier of the Safety Data Sheet

Company	CELLSCRIPT™, LLC.
Address	726 Post Rd.
City, State, Zip Code	Madison, WI 53713
Country	USA
Telephone Number	888-826-5586
Email Address	customerservice@cellscript.com
Emergency Telephone Number	1-608-442-6484 Monday to Friday 9am-5pm CST

### SECTION 2: Hazard(s) Identification

#### 2.1 Classification of the Substance or Mixture

This product as supplied is not considered hazardous.

#### 2.2 Signal Word

None, not considered hazardous as supplied.

#### 2.3 Hazard Statements

None, not considered hazardous as supplied.

#### 2.4 Pictograms

None

## 2.5 Precautionary Statements

None, not considered hazardous as supplied.

## 2.6 Hazards not otherwise classified

No data available. This product as provided is not considered a hazardous mixture or substance.

## SECTION 3: Composition / Information on Ingredients

### 3.1 Components of Substance or Mixture

Chemical Name	Formula	CAS number	EC number	Concentration
Scriptguard™ RNase Inhibitor	N/A	N/A	N/A	N/A
Glycerol	C <sub>3</sub> H <sub>8</sub> O <sub>3</sub>	56-81-5	200-289-5	50%
2-Amino-2-(hydromethyl)-1,3-propanediol	C <sub>4</sub> H <sub>11</sub> NO <sub>3</sub>	77-86-1	201-064-4	50 mM
Sodium chloride	NaCl	7647-14-5	231-598-3	100 mM
Dithiothreitol (DTT)	C <sub>4</sub> H <sub>10</sub> O <sub>2</sub> S <sub>2</sub>	3483-12-3	222-468-7	10 mM
Ethylenediaminetetraacetic acid (EDTA) Disodium Salt Dihydrate	C <sub>10</sub> H <sub>14</sub> N <sub>2</sub> O <sub>8</sub> •2H <sub>2</sub> O	6381-92-6	205-358-3	0.1 mM
Triton X-100	C <sub>14</sub> H <sub>22</sub> O(C <sub>2</sub> H <sub>4</sub> O) <sub>n</sub> (n=9-10)	9002-93-1	618-344-0	0.1%

**Impurities:** Not known.

## SECTION 4: First Aid Measures

### 4.1 Description of first aid measures

**Eye:** Gently flush with water, remove contact lenses if present, hold eye lids open and flush eye with plenty of water (or buffered saline eye wash) for at least 15 minutes. If eye irritation occurs, get medical advice/attention.

**Skin:** Remove contaminated clothing and wash before reuse. Gently wash the contaminated area with plenty of soap and water for at least 15 minutes. If skin irritation or rash develops, get medical advice/attention.

**Inhalation:** Move person to fresh air. If not breathing clear airway and start cardiopulmonary resuscitation (CPR), avoid mouth-to-mouth; give artificial respiration and get medical attention. If respiratory irritation, dizziness, nausea occurs, get medical advice/attention.

**Ingestion:** Rinse mouth with water. Do not induce vomiting. Consult a physician.

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

Acute and Delayed: No data available

Chronic: No data available

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

No data available

### SECTION 5: Fire Fighting Measures

Suitable extinguishing media:	Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media:	No Data Available.
Special hazards arising from mixture:	Carbon oxides, nitrogen oxides, sodium oxides, and sulfur oxide gas may be produced under fire conditions.
Advice for firefighters:	Wear self-contained breathing apparatus and full protective gear while extinguishing the fire. Avoid concentration to solids by evaporation.

### SECTION 6: Accidental Release Measures

#### 6.1 Personal precautions and protective equipment (PPE) and emergency procedures.

##### *Personal precautions and protective equipment (PPE):*

Depending on the extent of release, consider the need for trained firefighters/ emergency responders with adequate PPE for cleaning up. Keep unnecessary people away. Wear proper PPE for clean-up. Do not touch or walk through spilled material. Ensure adequate ventilation.

##### *Environmental precautions:*

Prevent spills from entering storm sewers, drains or waterways. Prevent release to the environment.

##### *Methods and material for containment and cleaning up.*

How to contain spill: Absorb onto inert material (sawdust or absorbent paper).

Cleaning-up methods: Shovel/sweep up debris and store in a sealed plastic container for disposal.

Additional information pertaining to the spill: Bulk materials and spill debris should be disposed of as hazardous waste.

Reference to other sections: See section 8 for further information on protective clothing and equipment, see section 13 for advice on waste disposal.

## SECTION 7: Handling and Storage

### 7.1 Safe handling

Precautions for safe handling:

Ensure adequate ventilation/exhaustion. Use appropriate personal protective equipment. Do not get in eyes or on skin, breathe vapors or mists. Remove contaminated clothing and protective equipment when leaving work areas.

General hygiene advice:

Use good industrial hygiene and safety practices. Wash hands before breaks, in use, and at the end of the workday.

Measures to prevent fire:

Not available

Measures to prevent aerosol/dust generation:

Not available

Measures to protect the environment:

Not available

### 7.2 Conditions for safe storage, including any incompatibilities.

Technical measures and storage conditions:

Store at -20°C in a freezer without a defrost cycle. Do not store at -70°C.

Packaging materials:

Store in original container.

Requirements for storage rooms and vessels:

No data available

### 7.3 Specific End Use(s)

For research use only.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
Glycerol (CAS 56-81-5)	TWA	USA	5 mg/m <sup>3</sup> , mist, respirable fraction  15 mg/m <sup>3</sup> , mist, total particulate	CAL/OSHA PEL

### 8.2 Engineering controls

Safety shower, eye wash station and ventilation systems.

### 8.3 Personal protection equipment

Eye/face protection:	Safety glasses with side shields or goggles approved by government standards such as NIOSH (US), CEN (EU) and WHMIS (CA) should be worn.
Skin/body protection:	Wear lab coat.
Hand protection:	Latex, nitrile or rubber gloves should be worn when handling substance.
Respiratory protection:	Use in well ventilated area. In case of insufficient ventilation, respirators should be used that have been tested and approved by appropriate government standards such as NIOSH.

### 8.4 General health & safety measures

Use clean laboratory practices and personal protection equipment

### 8.5 Environmental exposure controls

Do not let product enter drains.

## SECTION 9: Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Appearance/color	Clear
Odor:	Not available
Odor threshold:	Not available
pH:	7.5
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
Lower flammability/explosive limit:	Unknown
Upper flammability/explosive limit:	Unknown
Vapor pressure:	Not available
Vapor density:	Not available
Relative density:	Unknown
Solubility:	Water soluble
Partition coefficient: n-octanol/water:	Unknown
Auto-ignition temperature:	Unknown
Decomposition temperature:	Unknown
Viscosity:	Unknown
Explosive properties:	Unknown
Oxidizing properties:	Unknown
Other information:	Not available

## SECTION 10: Stability and Reactivity

Reactivity:	No dangerous reactions known under normal storage and usage conditions.
Chemical stability:	The product is stable under normal storage and usage conditions.
Possibility of hazardous reactions:	Under recommended conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid:	Avoid concentration of liquid mixture to solids.
Incompatible materials:	Strong oxidizing agents, bases, alkali metals, and reducing agents
Hazardous decomposition products:	Under normal conditions of storage and use, no hazardous decomposition products are known to be produced. See section 5 for hazardous gases produced under fire conditions.

## SECTION 11: Toxicological Information

Likely routes of exposure: Inhalation; ingestion, eye and skin contact.

### 11.1 Acute effects

Eye:	Redness and soreness.
Skin:	Redness, rash, burning, dry, and itching skin.
Inhalation:	Nasal irritation, headache, cough, shortness of breath.
Ingestion:	Malaise, dizziness, and nausea, gastrointestinal burns.
Toxicity:	Not available
Chronic health effects:	Not available
Carcinogenicity:	Not available
Germ cell mutagenicity:	Not available
Reproductive toxicity:	Not available
Developmental:	Not available
Fertility:	Not available
STOT-repeated exposure:	Not available
Aspiration hazard:	Not available.
Other information:	None

**IARC** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by the IARC.

**OSHA** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by the OSHA.

**NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by the NTP.

## **SECTION 12: Ecological Information**

### **12.1 Ecotoxicity**

Acute toxicity:	Not available
Chronic toxicity:	Not available
Eco/aquatic toxicity:	Not available

### **12.2 Persistence and Degradability**

Abiotic degradation:	Not available
Physical- and photo-chemical elimination:	Not available
Biodegradation:	Not available
Bioaccumulative potential:	Not available

### **12.3 Biological oxygen demand**

Theoretical oxygen demand at 10 ppm:	Not available
Chemical oxygen demand at 10 ppm:	Not available
Biological oxygen demand-5 at 10 ppm:	Not available

### **12.4 Known or predicted distribution to environmental compartments**

Surface tension:	Not available
Absorption/desorption:	Not available
Mobility in soil:	Not available

### **12.5 Results of PBT and vPvB assessment**

PBT results:	Not available
PvB results:	Not available

### **12.6 Other adverse effects**

Additional information:	No Data Available
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## SECTION 13: Disposal Considerations

### 13.1 Waste treatment methods

Product/packaging disposal:	Dispose of material in accordance with all federal, state, and local regulations. Use a licensed professional waste disposal service to dispose of this product.
Waste codes/waste designations according to LoW:	Unknown
Waste treatment-relevant information:	Dispose of material in accordance with all federal, state, and local regulations.
Sewage disposal-relevant information:	Prevent material from entering drains, sewer and waterways.
Other disposal recommendations:	None

## SECTION 14: Transport Information

This product is not regulated as dangerous goods by US Department of Transportation (DOT), ADR/RID (cross border) IMDG and IATA/ICAO.

UN number:	Not available
UN proper shipping name:	Not available
Transport hazard class(es):	Not available
Packing group:	Not available
Environmental hazards:	Not available
Special precautions for user:	Do not transport until safety precautions have been read and understood.

## SECTION 15: Regulatory Information

### 15.1 Occupational Safety and health Administration (OSHA) Hazards

Not listed

### 15.2 SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### 15.3 SARA 313 Components

No chemicals in this material are at levels that exceed threshold levels subject to the reporting requirements of SARA Title III, Section 313.

### 15.4 SARA 311/312 Hazards

Should EPCRA 311/312 reporting criteria be met, see section 2 for hazard information and classifications.

### 15.5 Massachusetts Right-To-Know Substance List

Not listed

**15.6 Pennsylvania Right-To-Know hazardous Substances**

Glycerol (CAS# 56-81-5): Present

**15.7 New Jersey Worker and Community Right-To-Know components**

Glycerol (CAS# 56-81-5): Present

**15.8 California Proposition 65**

This product does not contain any chemicals known to the State of California to cause birth defects or other reproductive harm.

**15.9 United States of America Toxic Substances Control Act (TSCA) List**

All ingredients except EDTA disodium dihydrate, are listed in the TSCA Inventory.

This product is for research use only.

**15.10 Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)**

All ingredients are listed.

**15.11 European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified chemical Substances (ELINCS), and No Longer Polymers (NLP)**

All ingredients are listed.

**SECTION 16: Other Information****16.1 Disclaimer**

The information provided on the SDS is the most accurate information to the best knowledge of CELLSCRIPT, LLC. at this time. The information provided within serves the purpose of guidance for safe handling, use, processing storage, transportation, disposal, and release. This document should not be considered as a warranty or quality specification. The information relates only to the specific material designated and is not valid when used in combination with other materials or within a process. CELLSCRIPT, LLC. assumes no liability for damage resulting from handling or contact with this product.

**16.2 Document Revision**

Last Revision Date: 02JUN2020

## Safety Data Sheet

Classification in accordance with Global Harmonizing System (GHS)

### SECTION 1: Identification of The Substance/Mixture and of the Company Undertaking

#### 1.1 Product Identifier

**Product Name** 100 mM DTT solution  
**Product Number** Component of kit.

#### 1.2 Recommended Use and Restrictions on Use

This product is a laboratory reagent for research and development use only. Avoid concentration of components by evaporation.

#### 1.3 Details of the Supplier of the Safety Data Sheet

Company	CELLSCRIPT™, LLC.
Address	726 Post Rd.
City, State, Zip Code	Madison, WI 53713
Country	USA
Telephone Number	888-826-5586
Email Address	customerservice@cellscript.com
Emergency Telephone Number	1-608-442-6484 Monday to Friday 9am-5pm CST

### SECTION 2: Hazard(s) Identification

#### 2.1 Classification of the Substance or Mixture

Acute Toxicity Oral:	category 4
Skin Irritation:	category 2
Eye Irritation:	category 2
Specific Target Organ Toxicity Single Exposure	category 3

#### 2.2 Signal Word

Warning

### 2.3 Hazards Statements

H302	Harmful if swallowed
H315	Causes Skin Irritation
H319	Causes Serious Eye Irritation
H335	May Cause Respiratory Irritation

### 2.4 Pictograms



### 2.5 Precautionary Statements:

P261	Avoid breathing dust/fumes/mist/vapors/spray
P264	Wash skin thoroughly after handling
P270	Do not eat, drink, or smoke when using this product.
P280	Wear eye protection/face protection/protective gloves
P301 + P312 + P330	If swallowed: call a POISON center/doctor if you feel unwell. Rinse mouth with water.
P302 + P352	If on skin: wash with plenty of soap and water
P305 + P351 + P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue to rinse.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.

### 2.6 Hazards, not otherwise classified

Unknown

## SECTION 3: Composition / Information on Ingredients

### 3.1 Components of Substance or Mixture

Chemical name	Formula	CAS number	EC number	Concentration
DL-dithiothreitol	C <sub>4</sub> H <sub>10</sub> O <sub>2</sub> S <sub>2</sub>	3483-12-3	222-468-7	100 mM
Proprietary	N/A	N/A	N/A	N/A

**Impurities:** Not known.

## SECTION 4: First Aid Measures

### 4.1 Description of first aid measures

**Eye:** Gently flush with water, remove contact lenses, if present, hold eye lids open and flush eye with plenty of water (or buffered saline eye wash) for at least 15 minutes. If eye irritation occurs, get medical advice/attention.

**Skin:** Remove contaminated clothing and wash before reuse. Gently wash the contaminated area with plenty of soap and water for at least 15 minutes. If skin irritation or rash develops, get medical advice/attention.

**Inhalation:** Move person to fresh air. If not breathing, clear airway and start cardiopulmonary resuscitation (CPR), avoid mouth-to-mouth; give artificial respiration and get medical attention. If respiratory irritation, dizziness, nausea occurs, get medical advice/attention.

**Ingestion:** Rinse mouth with water. Do not induce vomiting. Consult a physician.

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

Harmful if swallowed  
Causes skin irritation  
Causes serious eye irritation  
May cause respiratory irritation

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

No data available

## SECTION 5: Fire Fighting Measures

Suitable extinguishing media:	Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media:	No Data Available.
Special hazards arising from mixture:	Hazardous fumes may be generated in case of a fire including carbon dioxide, carbon monoxide, sulfur oxides, sodium oxides, nitrogen oxides, and hydrogen sulfide.
Advice for firefighters:	Wear self-contained breathing apparatus and full protective gear while extinguishing the fire.

## SECTION 6: Accidental Release Measures

### 6.1 Personal precautions and protective equipment (PPE) and emergency procedures.

#### *Personal precautions and protective equipment (PPE):*

Depending on the extent of release, consider the need for trained firefighters/ emergency responders with adequate PPE for cleaning up. Keep unnecessary people away. Wear proper PPE. Do not touch or walk through spilled material. Ensure adequate ventilation.

#### *Environmental precautions:*

Prevent spills from entering storm sewers, drains or waterways. Prevent release to the environment.

#### *Methods and material for containment and cleaning up.*

How to contain spill: Absorb onto inert material (sawdust or absorbent paper).

Cleaning-up methods: Shovel/sweep up debris and store in a sealed plastic container for disposal.

Reference to other sections: See section 8 for further information on protective clothing and equipment, see section 13 for advice on waste disposal.

## SECTION 7: Handling and Storage

### 7.1 Safe handling

Precautions for safe handling:	Ensure adequate ventilation/exhaustion. Use appropriate personal protective equipment. Do not get in eyes or on skin, breathe vapors or mists. Remove contaminated clothing and protective equipment when leaving work areas.
General hygiene advice:	Use good industrial hygiene and safety practices. Wash hands before breaks, in use, and at the end of the workday.
Measures to prevent fire:	Not available
Measures to prevent aerosol/dust generation:	Not available
Measures to protect the environment:	Not available

## 7.2 Conditions for safe storage, including any incompatibilities.

Technical measures and storage conditions:	Store at -20°C in a freezer without a defrost cycle.
Packaging materials:	Store tightly sealed in original container.
Requirements for storage rooms and vessels:	Store in well ventilated area.

## 7.3 Specific End Use(s)

For research use only.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control Parameters

This product, as supplied, does not contain any hazardous substances with occupational exposure limits established by OSHA.

### 8.2 Engineering controls

Safety shower, eye wash station and ventilation systems.

### 8.3 Personal protection equipment

Eye/face protection:	Safety glasses with side shields or goggles approved by government standards such as NIOSH (US), CEN (EU) and WHMIS (CA) should be used.
Skin/body protection:	Wear lab coat.
Hand protection:	Latex, nitrile or rubber gloves should be worn when handling substance.
Respiratory protection:	In case of insufficient ventilation, respirators should be used that have been tested and approved by appropriate government standards such as NIOSH.

### 8.4 General health & safety measures

Use clean laboratory practices and personal protection equipment

### 8.5 Environmental exposure controls

Do not let product enter drains.

## SECTION 9: Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Appearance/color	Clear
Odor:	Unpleasant
Odor threshold:	Not available
pH:	Not available
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
Lower flammability/explosive limit:	Not available
Upper flammability/explosive limit:	Not available
Vapor pressure:	Not available
Vapor density:	Not available
Relative density:	Not available
Solubility:	Water soluble/supplied as solution
Partition coefficient: n-octanol/water:	Unknown
Auto-ignition temperature:	Unknown
Decomposition temperature:	Unknown
Viscosity:	Unknown
Explosive properties:	Unknown
Oxidizing properties:	Unknown
Other information:	Not available

## SECTION 10: Stability and Reactivity

Reactivity:	No data available.
Chemical stability:	The product is stable under normal storage and usage conditions.
Possibility of hazardous reactions:	Under recommended conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid:	Exposure to moisture, product is hygroscopic.
Incompatible materials:	Strong oxidizing agents, bases, alkali metals, reducing agents
Hazardous decomposition products:	Under fire conditions, dangerous fumes such as carbon oxides, nitrogen oxides, sodium oxides, sulfur oxides, and hydrogen sulfide may be produced. See section 5 for fire fighting measures.



## SECTION 11: Toxicological Information

Likely routes of exposure: Inhalation, ingestion, eye and skin contact.

### 11.1 Acute effects

Eye: Causes eye irritation  
Skin: Causes skin irritation. May be toxic.  
Inhalation: Causes irritation to mucous membranes and upper respiratory tract. May be toxic.  
Ingestion: May be toxic.  
Toxicity: No data available.

Chronic health effects: Not available  
Carcinogenicity: Not available  
Germ cell mutagenicity: Not available  
Reproductive toxicity: Not available  
Developmental: Not available  
Fertility: Not available  
STOT-repeated exposure: Not available  
Aspiration hazard: Not available.  
Other information: None

**IARC** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by the IARC.

**OSHA** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by the OSHA.

**NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by the NTP.

## SECTION 12: Ecological Information

### 12.1 Ecotoxicity

Acute toxicity: Not available  
Chronic toxicity: Not available  
Eco/aquatic toxicity: Not available

### 12.2 Persistence and Degradability

Abiotic degradation: Not available  
Physical- and photo-chemical elimination: Not available  
Biodegradation: Not available  
Bioaccumulative potential: Not available

### 12.3 Biological oxygen demand

Theoretical oxygen demand at 10 ppm:	Not available
Chemical oxygen demand at 10 ppm:	Not available
Biological oxygen demand-5 at 10 ppm:	Not available

### 12.4 Known or predicted distribution to environmental compartments

Surface tension:	Not available
Absorption/desorption:	Not available
Mobility in soil:	Not available

### 12.5 Results of PBT and vPvB assessment

PBT results:	Not available
PvB results:	Not available

### 12.6 Other adverse effects

Additional information:	No Data Available.
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## SECTION 13: Disposal Considerations

### 13.1 Waste treatment methods

Product/package disposal:	Dispose of material in accordance with all federal, state, and local regulations. Use a licensed professional waste disposal service to dispose of this product.
Waste codes/waste designations according to LoW:	Unknown
Waste treatment-relevant information:	Dispose of material in accordance with all federal, state, and local regulations.
Sewage disposal-relevant information:	Prevent material from entering drains, sewer and waterways.
Other disposal recommendations:	None

## SECTION 14: Transport Information

This product is not regulated as dangerous goods by US Department of Transportation (DOT), ADR/RID (cross border) IMDG and IATA/ICAO.

Environmental hazards:	Not available
Special precautions for user:	Do not transport until safety precautions have been read and understood.

## **SECTION 15: Regulatory Information**

### **15.1 Occupational Safety and health Administration (OSHA) Hazards**

Not listed

### **15.2 SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### **15.3 SARA 313 Components**

No chemicals in this material exceed threshold levels that are subject to the reporting requirements of SARA Title III, Section 313.

### **15.4 SARA311/312 Hazards**

Acute Health Hazard. See section 2 for more information.

### **15.5 California Proposition 65**

This product does not contain any chemicals known to the State of California to cause birth defects or other reproductive harm.

### **15.6 United States of America Toxic Substances Control Act (TSCA) List**

DTT is listed in the TSCA inventory. This product is for research use only.

### **15.7 Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)**

Listed in the DSL.

### **15.8 European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified chemical Substances (ELINCS), and No Longer Polymers (NLP)**

Listed in the inventory.

## **SECTION 16: Other Information**

### **16.1 Disclaimer**

The information provided on the SDS is the most accurate information to the best knowledge of CELLSCRIPT, LLC. at this time. The information provided within serves the purpose of guidance for safe handling, use, processing storage, transportation, disposal, and release. This document should not be considered as a warranty or quality specification. The information relates only to the specific material designated and is not valid when used in combination with other materials or within a process. CELLSCRIPT, LLC. assumes no liability for damage resulting from handling or contact with this product.

### **16.2 Document Revision**

Last Revision Date: 29MAY2020

## Safety Data Sheet

Classification in accordance with Global Harmonizing System (GHS)

### SECTION 1: Identification of The Substance/Mixture and of the Company Undertaking

#### 1.1 Product Identifier

**Product Name** 10X T7-Scribe Transcription Buffer  
**Product Number** Component of Kit

#### 1.2 Recommended Use and Restrictions on Use

Avoid concentration of components by evaporation. This product is a laboratory reagent for research and development use only.

#### 1.3 Details of the Supplier of the Safety Data Sheet

Company	CELLSCRIPT™, LLC.
Address	726 Post Rd.
City, State, Zip Code	Madison, WI 53713
Country	USA
Telephone Number	888-826-5586
Email Address	customerservice@cellscript.com
Emergency Telephone Number	1-608-442-6484 Monday to Friday 9 am-5 pm CST

### SECTION 2: Hazard(s) Identification

#### 2.1 Classification of the Substance or Mixture

Skin Irritation category 2, H315  
Eye Irritation category 2A, H319

#### 2.2 Signal Word

Warning

#### 2.3 Hazard Statements

H315 causes skin irritation  
H319 causes eye irritation

## 2.4 Precautionary Statements

P264	Wash skin thoroughly after handling
P280	Wear protective gloves/ eye protection/ face protection
P302 + P352	IF ON SKIN: Wash with plenty of soap and water
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water. Remove contacts, if present and easy to do, and continue rinsing.
P332 + P313	If skin irritation occurs: get medical advice/attention
P337 + P313	If eye irritation persists: get medical advice/attention
P362	Remove contaminated clothing and wash before reuse

## 2.5 Pictograms



## 2.6 Hazards not otherwise classified

No Data Available.

## SECTION 3: Composition / Information on Ingredients

### 3.1 Components of Substance or Mixture

Chemical name	Formula	CAS number	EC number	Concentration
Proprietary	N/A	N/A	N/A	N/A

**Impurities:** Not known.

## SECTION 4: First Aid Measures

### 4.1 Description of first aid measures

Eye:	Gently flush with water, remove contact lenses, if present, hold eye lids open and flush eye with plenty of water (or buffered saline eye wash) for at least 15 minutes. If eye irritation occurs, get medical advice/attention.
Skin:	Remove contaminated clothing and wash before reuse. Gently wash the contaminated area with plenty of soap and water for at least 15 minutes. If skin irritation or rash develops, get medical advice/attention.
Inhalation:	Move person to fresh air. If not breathing clear airway and start cardiopulmonary resuscitation (CPR), avoid mouth-to-mouth; give artificial respiration and get medical attention. If respiratory irritation, dizziness, nausea occurs, get medical advice/attention.
Ingestion:	Rinse mouth with water. Do not induce vomiting. Consult a physician.

#### 4.2 Most important symptoms and effects

ACUTE No data available  
CHRONIC No data available

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

No data available

### SECTION 5: Fire Fighting Measures

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

Unsuitable extinguishing media: No Data Available.

Special hazards arising from mixture: Carbon oxides, Nitrogen oxides, Sulphur oxides, Sodium oxides, Hydrogen chloride gas, and Magnesium Oxide may be produced under fire conditions.

Advice for firefighters: Wear self-contained breathing apparatus and full protective gear while extinguishing the fire.

### SECTION 6: Accidental Release Measures

#### 6.1 Personal precautions and protective equipment (PPE) and emergency procedures.

##### *Personal precautions and protective equipment (PPE):*

Depending on the extent of release, consider the need for trained firefighters/ emergency responders with adequate PPE for cleaning up. Keep unnecessary people away. Wear proper PPE. Do not touch or walk through spilled material. Ensure adequate ventilation.

##### *Environmental precautions:*

Prevent spills from entering storm sewers, drains or waterways. Prevent release to the environment.

##### *Methods and material for containment and cleaning up.*

How to contain spill: Absorb onto inert material (sand or absorbent paper).

Cleaning-up methods: Shovel/sweep up debris and store in a sealed plastic container for disposal. Should be disposed of as hazardous waste.

Reference to other sections: See section 8 for further information on protective clothing and equipment, see section 13 for advice on waste disposal.

## SECTION 7: Handling and Storage

### 7.1 Safe handling

Precautions for safe handling:	Use appropriate personal protective equipment. Do not get in eyes or on skin, breathe vapors or mists. Ensure good ventilation. Remove contaminated clothing and protective equipment when leaving work areas.
General hygiene advice:	Use good industrial hygiene and safety practices. Wash hands before breaks, in use, and at the end of the workday.
Measures to prevent fire:	Not available
Measures to prevent aerosol/dust generation:	Not available
Measures to protect the environment:	Not available

### 7.2 Conditions for safe storage, including any incompatibilities.

Technical measures and storage conditions:	Store at -20°C in a freezer without a defrost cycle.
Packaging materials:	Store in original container.
Requirements for storage rooms and vessels:	Store in well ventilated area.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control Parameters

This product, as supplied, does not contain any hazardous substances with occupational exposure limits established by OSHA.

### 8.2 Engineering controls

Safety shower, eye wash station and ventilation systems.

### 8.3 Personal protection equipment

Eye/face protection:	Safety glasses with side shields or goggles approved by government standards such as NIOSH (US), CEN (EU) and WHMIS (CA).
Skin/body protection:	Wear lab coat.
Hand protection:	Latex, nitrile or rubber gloves should be worn when handling substance.
Respiratory protection:	Good general ventilation is sufficient to control worker exposure to airborne contaminants. In case of insufficient ventilation, respirators should be used that have been tested and approved by appropriate government standards such as NIOSH.

## 8.4 General health & safety measures

Use clean laboratory practices and personal protection equipment

## 8.5 Environmental exposure controls

Do not let product enter drains.

## SECTION 9: Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Appearance/color	Clear
Odor:	Odorless
Odor threshold:	None
pH:	Not available
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
Lower flammability/explosive limit:	Not available
Upper flammability/explosive limit:	Not available
Vapor pressure:	Not available
Vapor density:	Not available
Relative density:	Not available
Solubility:	Water soluble
Partition coefficient: n-octanol/water:	Unknown
Auto-ignition temperature:	Unknown
Decomposition temperature:	Unknown
Viscosity:	Unknown
Explosive properties:	Unknown
Oxidizing properties:	Unknown
Other information:	Not available

## SECTION 10: Stability and Reactivity

Reactivity:	No data available.
Chemical stability:	The product is stable under normal storage and usage conditions. Avoid concentration of liquid.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	No data available.
Incompatible materials:	Strong oxidizing agents, acid, acid chlorides, acid anhydrides.



Hazardous decomposition products: Carbon oxides, Nitrogen oxides, Sulphur oxides. Thermal Decomposition can lead to Chlorine, Magnesium oxides, and Hydrogen chloride gas release.

## SECTION 11: Toxicological Information

Likely routes of exposure: Inhalation, ingestion, eye and skin contact.

### 11.1 Acute effects

Eye:	Possible irritation
Skin:	Possible irritation
Inhalation:	Possible irritation
Ingestion:	May be harmful if swallowed
Toxicity:	Not available

STOT-single exposure:	Not available
Chronic health effects:	Not available
Carcinogenicity:	Not available
Germ cell mutagenicity:	Not available
Reproductive toxicity:	Not available
Developmental:	Not available
Fertility:	Not available
STOT-repeated exposure:	Not available
Aspiration hazard:	Not available
Other information:	None

**IARC** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by the IARC.

**OSHA** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by the OSHA.

**NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by the NTP.

## SECTION 12: Ecological Information

### 12.1 Ecotoxicity

Acute toxicity:	Not available
Chronic toxicity:	Not available
Eco/aquatic toxicity:	Not available

## 12.2 Persistence and Degradability

Abiotic degradation:	Not available
Physical- and photo-chemical elimination:	Not available
Biodegradation:	Not available
Bioaccumulative potential:	Not available

## 12.3 Biological oxygen demand

Theoretical oxygen demand at 10 ppm:	Not available
Chemical oxygen demand at 10 ppm:	Not available
Biological oxygen demand-5 at 10 ppm:	Not available

## 12.4 Known or predicted distribution to environmental compartments

Surface tension:	Not available
Absorption/desorption:	Not available
Mobility in soil:	Not available

## 12.5 Results of PBT and vPvB assessment

PBT results:	Not available
PvB results:	Not available

## 12.6 Other adverse effects

Additional information:	No known significant effects or critical hazards.
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## SECTION 13: Disposal Considerations

### 13.1 Waste treatment methods

Product/packaging disposal:	Dispose of material in accordance with all federal, state, and local regulations. Use a licensed professional waste disposal service to dispose of this product.
Waste codes/waste designations according to LoW:	Unknown
Waste treatment-relevant information:	Dispose of material in accordance with all federal, state, and local regulations.
Sewage disposal-relevant information:	Prevent material from entering drains, sewer and waterways.
Other disposal recommendations:	None

## SECTION 14: Transport Information

This product is not regulated by US Department of Transportation (DOT), ADR/RID (cross border) IMDG and IATA/ICAO.

UN number:	Not classified
UN proper shipping name:	Not classified
Transport hazard class(es):	Not classified
Packing group:	Not classified
Environmental hazards:	Not available
Special precautions for user:	Do not transport until safety precautions have been read and understood.

## SECTION 15: Regulatory Information

### 15.1 Occupational Safety and health Administration (OSHA) Hazards

Not listed

### 15.2 SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### 15.3 SARA 313 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

### 15.4 SARA311/312 Hazards

See section 2 for more information.

### 15.5 California Proposition 65

This product does not contain any chemicals known to the State of California to cause birth defects or other reproductive harm.

### 15.6 United States of America Toxic Substances Control Act (TSCA) List

Ingredients are listed in the TSCA inventory

### 15.7 Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Ingredients are listed.

### 15.8 European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified chemical Substances (ELINCS), and No Longer Polymers (NLP)

All ingredients are listed.

## **SECTION 16: Other Information**

### **16.1 Disclaimer**

The information provided on the SDS is the most accurate information to the best knowledge of CELLSCRIPT, LLC. at this time. The information provided within serves the purpose of guidance for safe handling, use, processing storage, transportation, disposal, and release. This document should not be considered as a warranty or quality specification. The information relates only to the specific material designated and is not valid when used in combination with other materials or within a process. CELLSCRIPT, LLC. assumes no liability for damage resulting from handling or contact with this product.

### **16.4 Document Revision**

Last Revision Date: 13JAN2021

## Safety Data Sheet

Classification in accordance with Global Harmonizing System (GHS)

**Note: This product is deemed non-hazardous**

### SECTION 1: Identification of The Substance/Mixture and of the Company Undertaking

#### 1.1 Product Identifier

**Product Name** RNase Free Water  
**Product Number** Component of kit.

#### 1.2 Recommended Use and Restrictions on Use

This product is a laboratory reagent for research and development use only.

#### 1.3 Details of the Supplier of the Safety Data Sheet

Company	CELLSCRIPT™, LLC.
Address	726 Post Rd.
City, State, Zip Code	Madison, WI 53713
Country	USA
Telephone Number	888-826-5586
Email Address	customerservice@cellscript.com
Emergency Telephone Number	1-608-442-6484 Monday to Friday 9am-5pm CST

### SECTION 2: Hazard(s) Identification

#### 2.1 Classification of the Substance or Mixture

This product is not considered hazardous.

#### 2.2 Signal Word

None, not considered hazardous as supplied.

#### 2.3 Hazard Statements

None, not considered hazardous as supplied.

#### 2.4 Pictograms

None

## 2.5 Precautionary Statements

None, not considered hazardous as supplied.

## 2.6 Hazards not otherwise classified

No data available. This product as provided is not considered a hazardous mixture or substance.

## SECTION 3: Composition / Information on Ingredients

### 3.1 Components of Substance or Mixture

Chemical name	Formula	CAS number	EC number	Concentration
Water	H <sub>2</sub> O	7732-18-5	231-791-2	N/A

**Impurities:** Not Known.

## SECTION 4: First Aid Measures

### 4.1 Description of first aid measures

**Eye:** Gently flush with water, remove contact lenses, if present, hold eye lids open and flush eye with plenty of water (or buffered saline eye wash) for at least 15 minutes. If eye irritation occurs, get medical advice/attention.

**Skin:** Gently wash the contaminated area with plenty of soap and water for at least 15 minutes.

**Inhalation:** Not expected to be an inhalation hazard under anticipated normal use conditions. If feeling unwell, consult a physician.

**Ingestion:** Rinse mouth with water. Do not induce vomiting. If feeling unwell, consult a physician.

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

**Acute and Delayed:** No data available

**Chronic:** No data available

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

No data available

## SECTION 5: Fire Fighting Measures

Suitable extinguishing media:	Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media:	No Data Available.
Special hazards arising from mixture:	No Data Available.
Advice for firefighters:	Wear self-contained breathing apparatus and full protective gear while extinguishing the fire.

## SECTION 6: Accidental Release Measures

### 6.1 Personal precautions and protective equipment (PPE) and emergency procedures.

#### *Personal precautions and protective equipment (PPE):*

Keep unnecessary people away from spill. Wear proper PPE for clean up. Do not touch or walk through spilled material. Ensure adequate ventilation.

#### *Environmental precautions:*

No special environmental precautions known.

#### *Methods and material for containment and cleaning up.*

How to contain spill: Absorb onto inert material (sawdust or absorbent paper).

Cleaning-up methods: Shovel/sweep up debris and store in a sealed plastic container for disposal.

Reference to other sections: See section 8 for further information on protective clothing and equipment, see section 13 for advice on waste disposal.

## SECTION 7: Handling and Storage

### 7.1 Safe handling

Precautions for safe handling:	Ensure adequate ventilation/exhaustion. Use appropriate personal protective equipment. Do not get in eyes or on skin, breathe vapors or mists. Remove contaminated clothing and protective equipment when leaving work areas.
General hygiene advice:	Use good industrial hygiene and safety practices. Wash hands before breaks, in use, and at the end of the workday.
Measures to prevent fire:	Not available
Measures to prevent aerosol/dust generation:	Not available
Measures to protect the environment:	Not available

## 7.2 Conditions for safe storage, including any incompatibilities.

Technical measures and storage conditions:	Store at -20°C in a freezer without a defrost cycle.
Packaging materials:	Store in original container.
Requirements for storage rooms and vessels:	No data available

## SECTION 8: Exposure controls/personal protection

### 8.1 Control Parameters

This product, as supplied, does not contain any hazardous substances with occupational exposure limits established by OSHA.

### 8.2 Engineering controls

Safety shower, eye wash station and ventilation systems.

### 8.3 Personal protection equipment

Eye/face protection:	Safety glasses with side shields or goggles approved by government standards such as NIOSH (US), CEN (EU) and WHMIS (CA) should be used.
Skin/body protection:	Wear lab coat.
Hand protection:	Latex, nitrile or rubber gloves should be worn when handling substance.
Respiratory protection:	Use in well ventilated area. In case of insufficient ventilation, respirators should be used that have been tested and approved by appropriate government standards such as NIOSH.

### 8.4 General health & safety measures

Use clean laboratory practices and personal protection equipment

### 8.5 Environmental exposure controls

No special environmental precautions known.



## SECTION 9: Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Appearance/color	Clear
Odor:	Odorless
Odor threshold:	Not available
pH:	Not available
Melting point/freezing point:	0 °C
Initial boiling point and boiling range:	100 °C
Flash Point:	Not available
Evaporation rate:	Not available
Flammability:	Not available
Lower flammability/explosive limit:	Unknown
Upper flammability/explosive limit:	Unknown
Vapor pressure:	Not available
Vapor density:	Not available
Relative density:	1.0
Solubility:	Water soluble
Partition coefficient: n-octanol/water:	Unknown
Auto-ignition temperature:	Unknown
Decomposition temperature:	Unknown
Viscosity:	Unknown
Explosive properties:	Unknown
Oxidizing properties:	Unknown
Other information:	Not available

## SECTION 10: Stability and Reactivity

Reactivity:	No dangerous reactions known under recommended storage and usage conditions.
Chemical stability:	The product is stable under recommended storage and usage conditions.
Possibility of hazardous reactions:	Under recommended conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid:	No data available.
Incompatible materials:	No data available.
Hazardous decomposition products:	No data available.

## SECTION 11: Toxicological Information

Likely routes of exposure: Inhalation, ingestion, eye and skin contact.

### 11.1 Acute effects

Eye: No data available.  
Skin: No data available.  
Inhalation: No data available.  
Ingestion: No data available.  
Toxicity: No data available.

Chronic health effects: Not available  
Carcinogenicity: Not available  
Germ cell mutagenicity: Not available  
Reproductive toxicity: Not available  
Developmental: Not available  
Fertility: Not available  
STOT-repeated exposure: Not available  
Aspiration hazard: Not available.  
Other information: None

**IARC** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by the IARC.

**OSHA** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by the OSHA.

**NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by the NTP.

## SECTION 12: Ecological Information

### 12.1 Ecotoxicity

Acute toxicity: Not available  
Chronic toxicity: Not available  
Eco/aquatic toxicity: Not available

### 12.2 Persistence and Degradability

Abiotic degradation: Not available  
Physical- and photo-chemical elimination: Not available  
Biodegradation: Not available  
Bioaccumulative potential: Not available

### 12.3 Biological oxygen demand

Theoretical oxygen demand at 10 ppm:	Not available
Chemical oxygen demand at 10 ppm:	Not available
Biological oxygen demand-5 at 10 ppm:	Not available

### 12.4 Known or predicted distribution to environmental compartments

Surface tension:	Not available
Absorption/desorption:	Not available
Mobility in soil:	Not available

### 12.5 Results of PBT and vPvB assessment

PBT results:	Not available
PvB results:	Not available

### 12.6 Other adverse effects

Additional information:	No Data Available.
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## SECTION 13: Disposal Considerations

### 13.1 Waste treatment methods

Product/packaging disposal:	Dispose of material in accordance with all federal, state, and local regulations.
Waste codes/waste designations according to LoW:	Unknown
Waste treatment-relevant information:	Dispose of material in accordance with all federal, state, and local regulations.
Sewage disposal-relevant information:	Not available.
Other disposal recommendations:	None

## SECTION 14: Transport Information

This product is not regulated as dangerous goods by US Department of Transportation (DOT), ADR/RID (cross border) IMDG and IATA/ICAO.

UN number:	Not classified
UN proper shipping name:	Not classified
Transport hazard class(es):	Not classified
Packing group:	Not classified
Environmental hazards:	Not available

Special precautions for user:

Do not transport until safety precautions have been read and understood.

## **SECTION 15: Regulatory Information**

### **15.1 Occupational Safety and health Administration (OSHA) Hazards**

Not listed

### **15.2 CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

### **15.3 Massachusetts Right-To-Know Substance List**

Not listed

### **15.4 Pennsylvania Right-To-Know hazardous Substances**

Not listed

### **15.5 New Jersey Worker and Community Right-To-Know components**

Not listed

### **15.6 California Proposition 65**

This product does not contain any chemicals known to the State of California to cause birth defects or other reproductive harm.

### **15.7 United States of America Toxic Substances Control Act (TSCA) List**

Listed in the TSCA Inventory.

### **15.8 Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)**

Listed.

### **15.9 European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified chemical Substances (ELINCS), and No Longer Polymers (NLP)**

Listed.

## **SECTION 16: Other Information**

### **16.1 Disclaimer**

The information provided on the SDS is the most accurate information to the best knowledge of CELLSCRIPT, LLC. at this time. The information provided within serves the purpose of guidance for safe handling, use, processing storage, transportation, disposal, and release. This document should not be considered as a warranty or quality specification. The information relates only to the specific material designated and is not valid when used in combination with

other materials or within a process. CELLSRIPT, LLC. assumes no liability for damage resulting from handling or contact with this product.

## **16.2 Document Revision**

Last Revision Date: 03JUN2020

## Safety Data Sheet

Classification in accordance with Global Harmonizing System (GHS)

**Note: This product is deemed non-hazardous**

### SECTION 1: Identification of The Substance/Mixture and of the Company Undertaking

#### 1.1 Product Identifier

**Product Name** T7 Control Template DNA  
**Product Number** Component of kit.

#### 1.2 Recommended Use and Restrictions on Use

This product is a laboratory reagent for research and development use only.

#### 1.3 Details of the Supplier of the Safety Data Sheet

Company	CELLSCRIPT™, LLC.
Address	726 Post Rd.
City, State, Zip Code	Madison, WI 53713
Country	USA
Telephone Number	888-826-5586
Email Address	customerservice@cellscript.com
Emergency Telephone Number	1-608-442-6484 Monday to Friday 9am-5pm CST

### SECTION 2: Hazard(s) Identification

#### 2.1 Classification of the Substance or Mixture

This product is not considered hazardous.

#### 2.2 Signal Word

None, not considered hazardous as supplied.

#### 2.3 Hazard Statements

None, not considered hazardous as supplied.

#### 2.4 Pictograms

None

## 2.5 Precautionary Statements

None, not considered hazardous as supplied.

## 2.6 Hazards not otherwise classified

No data available. This product as provided is not considered a hazardous mixture or substance.

## SECTION 3: Composition / Information on Ingredients

### 3.1 Components of Substance or Mixture

Chemical name	Formula	CAS number	EC number	Concentration
Tris(hydroxymethyl)amino methane	$(\text{HOCH}_2)_3\text{CNH}_2$	77-86-1	201-064-4	10 mM
Ethylenediaminetetraacetic acid (EDTA) disodium salt dihydrate	$\text{C}_{10}\text{H}_{14}\text{N}_2\text{Na}_2\text{O}_8 \cdot 2\text{H}_2\text{O}$	6381-92-6	613-386-6	1 mM

**Impurities:** Not Known.

## SECTION 4: First Aid Measures

### 4.1 Description of first aid measures

**Eye:** Gently flush with water, remove contact lenses, if present, hold eye lids open and flush eye with plenty of water (or buffered saline eye wash) for at least 15 minutes. If eye irritation occurs, get medical advice/attention.

**Skin:** Remove contaminated clothing and wash before reuse. Gently wash the contaminated area with plenty of soap and water for at least 15 minutes. If skin irritation or rash develops, get medical advice/attention.

**Inhalation:** Move person to fresh air. If not breathing, clear airway and start cardiopulmonary resuscitation (CPR), avoid mouth-to-mouth; give artificial respiration and get medical attention. If respiratory irritation, dizziness, nausea occurs, get medical advice/attention.

**Ingestion:** Rinse mouth with water. Do not induce vomiting. Consult a physician.

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

**Acute and Delayed:** No data available

**Chronic:** No data available

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

No data available

## SECTION 5: Fire Fighting Measures

Suitable extinguishing media:	Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media:	No Data Available.
Special hazards arising from mixture:	No Data Available.
Advice for firefighters:	Wear self-contained breathing apparatus and full protective gear while extinguishing the fire.

## SECTION 6: Accidental Release Measures

### 6.1 Personal precautions and protective equipment (PPE) and emergency procedures.

#### *Personal precautions and protective equipment (PPE):*

Depending on the extent of release, consider the need for trained firefighters/ emergency responders with adequate PPE for cleaning up. Keep unnecessary people away. Ensure adequate ventilation. Wear proper PPE for clean up.

#### *Environmental precautions:*

Prevent spills from entering storm sewers, drains or waterways. Prevent release to the environment.

#### *Methods and material for containment and cleaning up.*

How to contain spill: Absorb onto inert material (sawdust or absorbent paper).

Cleaning-up methods: Shovel/sweep up debris and store in a sealed plastic container for disposal.

Reference to other sections: See section 8 for further information on protective clothing and equipment, see section 13 for advice on waste disposal.

## SECTION 7: Handling and Storage

### 7.1 Safe handling

Precautions for safe handling:	Ensure adequate ventilation/exhaustion. Use appropriate personal protective equipment. Do not get in eyes or on skin. Do not breathe vapors or mists. Remove contaminated clothing and protective equipment when leaving work areas.
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General hygiene advice:	Use good industrial hygiene and safety practices. Wash hands before breaks, in use, and at the end of the workday.
Measures to prevent fire:	Not available
Measures to prevent aerosol/dust generation:	Not available
Measures to protect the environment:	Not available

## 7.2 Conditions for safe storage, including any incompatibilities.

Technical measures and storage conditions:	Store at -20°C in a freezer without a defrost cycle.
Packaging materials:	Store in original container.
Requirements for storage rooms and vessels:	No data available

## 7.3 Specific End Use(s)

For research use only.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control Parameters

This product, as supplied, does not contain any hazardous substances with occupational exposure limits established by OSHA.

### 8.2 Engineering controls

Safety shower, eye wash station and ventilation systems.

### 8.3 Personal protection equipment

Eye/face protection:	Safety glasses with side shields or goggles approved by government standards such as NIOSH (US), CEN (EU) and WHMIS (CA) should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes or mists.
Skin/body protection:	Wear lab coat.
Hand protection:	Latex, nitrile or rubber gloves should be worn when handling substance.
Respiratory protection:	Use in well ventilated area. In case of insufficient ventilation, respirators should be used that have been tested and approved by appropriate government standards such as NIOSH.

### 8.4 General health & safety measures

Use clean laboratory practices and personal protection equipment

## 8.5 Environmental exposure controls

No special environmental precautions known.

## SECTION 9: Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Appearance/color	Clear
Odor:	Not available
Odor threshold:	Not available
pH:	7.5
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
Lower flammability/explosive limit:	Unknown
Upper flammability/explosive limit:	Unknown
Vapor pressure:	Not available
Vapor density:	Not available
Relative density:	Not available
Solubility:	Water soluble
Partition coefficient: n-octanol/water:	Unknown
Auto-ignition temperature:	Unknown
Decomposition temperature:	Unknown
Viscosity:	Unknown
Explosive properties:	Unknown
Oxidizing properties:	Unknown
Other information:	Not available

## SECTION 10: Stability and Reactivity

Reactivity:	No data available.
Chemical stability:	The product is stable under recommended storage and usage conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	No data available.
Incompatible materials:	Strong oxidizing agents.
Hazardous decomposition products:	No data available.

## SECTION 11: Toxicological Information

Likely routes of exposure: Inhalation, ingestion, eye and skin contact.

### 11.1 Acute effects

Eye: No data available.  
Skin: No data available.  
Inhalation: No data available.  
Ingestion: No data available.  
Toxicity: No data available.

Chronic health effects: Not available  
Carcinogenicity: Not available  
Germ cell mutagenicity: Not available  
Reproductive toxicity: Not available  
Developmental: Not available  
Fertility: Not available  
STOT-repeated exposure: Not available  
Aspiration hazard: Not available.  
Other information: None

**IARC** No component of this product comprising 0.1% or more of the final mixture is identified as a probable, possible, or confirmed carcinogen by the IARC.

**OSHA** No component of this product comprising 0.1% or more of the final mixture is identified as a probable, possible, or confirmed carcinogen by the OSHA.

**NTP** No component of this product comprising 0.1% or more of the final mixture is identified as a probable, possible, or confirmed carcinogen by the NTP.

## SECTION 12: Ecological Information

### 12.1 Ecotoxicity

Acute toxicity: Not available  
Chronic toxicity: Not available  
Eco/aquatic toxicity: Not available

### 12.2 Persistence and Degradability

Abiotic degradation: Not available  
Physical- and photo-chemical elimination: Not available  
Biodegradation: Not available  
Bioaccumulative potential: Not available

### 12.3 Biological oxygen demand

Theoretical oxygen demand at 10 ppm:	Not available
Chemical oxygen demand at 10 ppm:	Not available
Biological oxygen demand-5 at 10 ppm:	Not available

### 12.4 Known or predicted distribution to environmental compartments

Surface tension:	Not available
Absorption/desorption:	Not available
Mobility in soil:	Not available

### 12.5 Results of PBT and vPvB assessment

PBT results:	Not available
PvB results:	Not available

### 12.6 Other adverse effects

Additional information:	No Data Available.
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## SECTION 13: Disposal Considerations

### 13.1 Waste treatment methods

Product/packaging disposal:	Dispose of material in accordance with all federal, state, and local regulations.
Waste codes/waste designations according to LoW:	Unknown
Waste treatment-relevant information:	Dispose of material in accordance with all federal, state, and local regulations.
Sewage disposal-relevant information:	Not available.
Other disposal recommendations:	None

## SECTION 14: Transport Information

This product is not regulated as dangerous goods by US Department of Transportation (DOT), ADR/RID (cross border) IMDG and IATA/ICAO.

UN number:	Not classified
UN proper shipping name:	Not classified
Transport hazard class(es):	Not classified
Packing group:	Not classified
Environmental hazards:	Not available
Special precautions for user:	Do not transport until safety precautions have been read and understood.

## SECTION 15: Regulatory Information

### 15.1 Occupational Safety and health Administration (OSHA) Hazards

Not listed

### 15.2 CERCLA

This product, as provided, does not contain ingredients with known CAS numbers that exceed the threshold reporting requirements under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Ethylenediaminetetraacetic acid (EDTA) has a reporting requirement of 5,000 pounds.

### 15.3 SARA 302 Components

No chemicals in this product are subject to the SARA Title III, Section 302 reporting requirements.

### 15.4 SARA 313 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

### 15.5 SARA 311/312 Hazards

Should product meet reporting requirements, refer to section 2 for applicable hazard classifications.

### 15.6 Massachusetts Right-To-Know Substance List

Not listed

### 15.7 Pennsylvania Right-To-Know hazardous Substances

Not listed.

### 15.8 New Jersey Worker and Community Right-To-Know components

Ethylenediaminetetraacetic acid (EDTA) is listed.

### **15.9 California Right-To-Know hazardous Substances**

Ethylenediaminetetraacetic acid (EDTA) is listed.

### **15.10 California Proposition 65**

This product does not contain any chemicals known to the State of California to cause birth defects or other reproductive harm.

### **15.11 United States of America Toxic Substances Control Act (TSCA) List**

Tris(hydroxymethyl)aminomethane and Ethylenediaminetetraacetic acid (EDTA) are listed.

### **15.12 Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)**

Tris(hydroxymethyl)aminomethane and Ethylenediaminetetraacetic acid (EDTA) are listed.

### **15.13 European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified chemical Substances (ELINCS), and No Longer Polymers (NLP)**

Tris(hydroxymethyl)aminomethane and Ethylenediaminetetraacetic acid (EDTA) are listed.

## **SECTION 16: Other Information**

### **16.1 Disclaimer**

The information provided on the SDS is the most accurate information to the best knowledge of CELLSCRIPT, LLC. at this time. The information provided within serves the purpose of guidance for safe handling, use, processing storage, transportation, disposal, and release. This document should not be considered as a warranty or quality specification. The information relates only to the specific material designated and is not valid when used in combination with other materials or within a process. CELLSCRIPT, LLC. assumes no liability for damage resulting from handling or contact with this product.

### **16.2 Document Revision**

Last Revision Date: 06OCT2020

## Safety Data Sheet

Classification in accordance with Global Harmonizing System (GHS)

**Note: This product is deemed non-hazardous**

### SECTION 1: Identification of The Substance/Mixture and of the Company Undertaking

#### 1.1 Product Identifier

**Product Name** RNase Free DNase I, 1 U/μl  
**Product Number** Component of kit.

#### 1.2 Recommended Use and Restrictions on Use

Enzyme Solution. Avoid concentration of components by evaporation. This product is a laboratory reagent for research and development use only.

#### 1.3 Details of the Supplier of the Safety Data Sheet

Company	CELLSCRIPT™, LLC.
Address	726 Post Rd.
City, State, Zip Code	Madison, WI 53713
Country	USA
Telephone Number	888-826-5586
Email Address	customerservice@cellscript.com
Emergency Telephone Number	1-608-442-6484 Monday to Friday 9am-5pm CST

### SECTION 2: Hazard(s) Identification

This product with the given component concentrations is not considered a hazardous mixture or substance.

**Hazards not otherwise classified:** No data available. This product as provided is not considered a hazardous mixture or substance.

## SECTION 3: Composition / Information on Ingredients

### 3.1 Components of Substance or Mixture

Chemical name	Formula	CAS number	EC number	Concentration
Deoxyribonuclease I	N/A	9003-98-9	232-667-0	1 U/ $\mu$ l
Glycerol	C <sub>3</sub> H <sub>5</sub> (OH) <sub>3</sub>	56-81-5	200-289-5	50 %
2-Amino-2-(hydroxymethyl)-1,3-propanediol	NH <sub>2</sub> C(CH <sub>2</sub> OH) <sub>3</sub>	77-86-1	201-064-4	50 mM
Calcium Chloride	CaCl <sub>2</sub>	10043-52-4	233-140-8	10 mM
Magnesium Chloride	MgCl <sub>2</sub>	7786-30-3	232-094-6	10 mM
Triton X-100	C <sub>16</sub> H <sub>26</sub> O <sub>2</sub>	9002-93-1	925-964-8	0.1 %

**Impurities:** Not known.

## SECTION 4: First Aid Measures

### 4.1 Description of first aid measures

**Eye:** Gently flush with water, remove contact lenses, if present, hold eye lids open and flush eye with plenty of water (or buffered saline eye wash) for at least 15 minutes. If eye irritation occurs, get medical advice/attention.

**Skin:** Remove contaminated clothing and wash before reuse. Gently wash the contaminated area with plenty of soap and water for at least 15 minutes. If skin irritation or rash develops, get medical advice/attention.

**Inhalation:** Move person to fresh air. If not breathing clear airway and start cardiopulmonary resuscitation (CPR), avoid mouth-to-mouth; give artificial respiration and get medical attention. If respiratory irritation, dizziness, nausea occurs, get medical advice/attention.

**Ingestion:** Rinse mouth with water. Do not induce vomiting. Consult a physician.

### 4.2 Most important symptoms and effects

**ACUTE** No data available

**CHRONIC** No data available

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

No data available



## SECTION 5: Fire Fighting Measures

Suitable extinguishing media:	Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media:	None
Special hazards arising from mixture:	No Data Available.
Advice for firefighters:	Wear self-contained breathing apparatus while extinguishing the fire.

## SECTION 6: Accidental Release Measures

### 6.1 Personal precautions and protective equipment (PPE) and emergency procedures.

#### *Personal precautions and protective equipment (PPE):*

Depending on the extent of release, consider the need for trained firefighters/ emergency responders with adequate PPE for cleaning up. Keep unnecessary people away. Wear proper PPE. Do not touch or walk through spilled material. Ensure adequate ventilation.

#### *Environmental precautions:*

Prevent spills from entering storm sewers, drains or waterways. Prevent release to the environment.

#### *Methods and material for containment and cleaning up.*

How to contain spill:	Absorb onto inert material (sawdust or absorbent paper).
Cleaning-up methods:	Shovel/sweep up debris and store in a sealed plastic container for disposal.

Reference to other sections: See section 8 for further information on protective clothing and equipment, see section 13 for advice on waste disposal.

## SECTION 7: Handling and Storage

### 7.1 Safe handling

Precautions for safe handling:	Use appropriate personal protective equipment. Do not get in eyes or on skin, breathe vapors or mists. Ensure good ventilation. Remove contaminated clothing and protective equipment when leaving work areas.
General hygiene advice:	Use good industrial hygiene and safety practices. Wash hands before breaks, in use, and at the end of the workday.
Measures to prevent fire:	Not available
Measures to prevent aerosol/dust generation:	Not available
Measures to protect the environment:	Not available

## 7.2 Conditions for safe storage, including any incompatibilities.

Technical measures and storage conditions:	Store at -20°C in a freezer without a defrost cycle.
Packaging materials:	Store in original container.
Requirements for storage rooms and vessels:	Not available

## SECTION 8: Exposure controls/personal protection

### 8.1 Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
Glycerol (CAS 56-81-5)	TWA	USA	5 mg/m <sup>3</sup> , mist, respirable fraction  15 mg/m <sup>3</sup> , mist, total particulate	Cal/OSHA PEL

### 8.2 Engineering controls

Safety shower, eye wash station, and ventilation systems

### 8.3 Personal protection equipment

Eye/face protection:	Safety glasses with side shields or goggles approved by government standards such as NIOSH (US), CEN (EU) and WHMIS (CA) should be used.
Skin/body protection:	Wear lab coat.
Hand protection:	Latex, nitrile or rubber gloves should be worn when handling substance.
Respiratory protection:	General ventilation is sufficient to control worker exposure to airborne contaminants. In case of insufficient ventilation, respirators should be used that have been tested and approved by appropriate government standards such as NIOSH.

### 8.4 General health & safety measures

Use clean laboratory practices and personal protection equipment

### 8.5 Environmental exposure controls

Do not let product enter drains.

## SECTION 9: Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Appearance/color	Clear
Odor:	Not available
Odor threshold:	Not available
pH:	7.5
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
Lower flammability/explosive limit:	Not available
Upper flammability/explosive limit:	Not available
Vapor pressure:	Not available
Vapor density:	Not available
Relative density:	Not available
Solubility:	Water soluble
Partition coefficient: n-octanol/water:	Unknown
Auto-ignition temperature:	Unknown
Decomposition temperature:	Unknown
Viscosity:	Unknown
Explosive properties:	Unknown
Oxidizing properties:	Not available
Other information:	Not available

## SECTION 10: Stability and Reactivity

Reactivity	No data available.
Chemical stability:	The product is stable under normal storage conditions.
Possibility of hazardous reactions:	Under recommended conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid:	No data available.
Incompatible materials:	Strong oxidizing agents.
Hazardous decomposition products:	Under normal conditions of storage and use, no hazardous decomposition products are known to be produced.

## SECTION 11: Toxicological Information

Likely routes of exposure: Inhalation, ingestion, eye and skin contact.

### 11.1 Acute effects

Eye:	Not available.
Skin:	Not available.
Inhalation:	Not available.
Ingestion:	Not available.
Toxicity:	Not available.

Chronic health effects:	Not available
Carcinogenicity:	Not available
Germ cell mutagenicity:	Not available
Reproductive toxicity:	Not available
Developmental:	Not available
Fertility:	Not available
STOT-repeated exposure:	Not available
Aspiration hazard:	Not available.
Other information:	None

**IARC** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by the IARC.

**OSHA** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by the OSHA.

**NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by the NTP.

## SECTION 12: Ecological Information

### 12.1 Ecotoxicity

Acute toxicity:	Not available
Chronic toxicity:	Not available
Eco/aquatic toxicity:	Not available

### 12.2 Persistence and Degradability

Abiotic degradation:	Not available
Physical- and photo-chemical elimination:	Not available
Biodegradation:	Not available
Bioaccumulative potential:	Not available

### 12.3 Biological oxygen demand

Theoretical oxygen demand at 10 ppm:	Not available
Chemical oxygen demand at 10 ppm:	Not available
Biological oxygen demand-5 at 10 ppm:	Not available

### 12.4 Known or predicted distribution to environmental compartments

Surface tension:	Not available
Absorption/desorption:	Not available
Mobility in soil:	Not available

## 12.5 Results of PBT and vPvB assessment

PBT results: Not available  
PvB results: Not available

## 12.6 Other adverse effects

Additional information: No known significant effects or critical hazards.

## SECTION 13: Disposal Considerations

### 13.1 Waste treatment methods

Product/packaging disposal:	Dispose of material in accordance with all federal, state, and local regulations.
Waste codes/waste designations according to LoW:	Unknown
Waste treatment-relevant information:	Dispose of material in accordance with all federal, state, and local regulations.
Sewage disposal-relevant information:	Prevent material from entering drains, sewer and waterways.
Other disposal recommendations:	None

## SECTION 14: Transport Information

This product is classified as not hazardous and is not regulated by US Department of Transportation (DOT), ADR/RID (cross border) IMDG and IATA/ICAO.

UN number:	Not classified
UN proper shipping name:	Not classified
Transport hazard class(es):	Not classified
Packing group:	Not classified
Environmental hazards:	Not available
Special precautions for user:	Do not transport until safety precautions have been read and understood.

## SECTION 15: Regulatory Information

### 15.1 Occupational Safety and health Administration (OSHA) Hazards

Not listed

### 15.2 SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### **15.3 SARA 313 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

### **15.4 SARA 311/312 Hazards**

See section 2 for more information.

### **15.5 Pennsylvania Right-To-Know Hazardous Substances**

Glycerol (CAS# 56-81-5): Present

### **15.6. New Jersey Worker and Community Right-To-Know Components**

Glycerol (CAS# 56-81-5): Present

### **15.7 Massachusetts Right-To-Know Substance List**

No ingredients are listed.

### **15.5 California Proposition 65**

This product does not contain any chemicals known to the State of California to cause birth defects or other reproductive harm.

### **15.6 United States of America Toxic Substances Control Act (TSCA) List**

All ingredients are listed in the TSCA inventory.

### **15.7 Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)**

All ingredients are listed.

### **15.8 European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified chemical Substances (ELINCS), and No Longer Polymers (NLP)**

All ingredients are listed.

## **SECTION 16: Other Information**

### **16.1 Disclaimer**

The information provided on the SDS is the most accurate information to the best knowledge of CELLSCRIPT, LLC. at this time. The information provided within serves the purpose of guidance for safe handling, use, processing storage, transportation, disposal, and release. This document should not be considered as a warranty or quality specification. The information relates only to the specific material designated and is not valid when used in combination with other materials or within a process. CELLSCRIPT, LLC. assumes no liability for damage resulting from handling or contact with this product.

### **16.4 Document Revision**

Last Revision Date: 12MAY2020

## Safety Data Sheet

Classification in accordance with Global Harmonizing System (GHS)

### SECTION 1: Identification of The Substance/Mixture and of the Company Undertaking

#### 1.1 Product Identifier

**Product Name** GAΨ5mC PreMix  
**Product Number** Component of kit.

#### 1.2 Recommended Use and Restrictions on Use

Avoid concentration of components by evaporation. This product is a laboratory reagent for research and development use only.

#### 1.3 Details of the Supplier of the Safety Data Sheet

Company	CELLSCRIPT™, LLC.
Address	726 Post Rd.
City, State, Zip Code	Madison, WI 53713
Country	USA
Telephone Number	888-826-5586
Email Address	customerservice@cellscript.com
Emergency Telephone Number	1-608-442-6484 Monday to Friday 9am-5pm CST

### SECTION 2: Hazard(s) Identification

#### 2.1 Classification of the Substance or Mixture

This product with the given component concentrations is not considered hazardous.

#### 2.2 Hazards not otherwise classified

This product as provided is not considered hazardous.

## SECTION 3: Composition / Information on Ingredients

### Components of Substance or Mixture

Chemical name	Formula	CAS number	EC number	Concentration
Adenosine 5'-triphosphate	$C_{10}H_{14}N_5O_{13}P_3 \cdot Na_2 \cdot H_2O$	34369-07-8	213-579-1	25 mM
5-methylcytidine 5'-triphosphate	$C_{10}H_{18}N_3O_{14}P_3 \cdot Na_2 \cdot H_2O$	327174-86-7	N/A	25 mM
Pseudouridine 5'-triphosphate	$C_9H_{12}N_2O_{15}P_3 \cdot Na_3 \cdot H_2O$	1175-34-4	N/A	25 mM
Guanosine 5'-triphosphate	$C_{10}H_{13}N_5O_{14}P_3 \cdot Na_3 \cdot H_2O$	36051-31-7	252-847-2	25 mM

**Impurities:** Not known.

## SECTION 4: First Aid Measures

### 4.1 Description of first aid measures

**Eye:** Gently flush with water, remove contact lenses, if present, hold eye lids open and flush eye with plenty of water (or buffered saline eye wash) for at least 15 minutes. If eye irritation occurs, get medical advice/attention.

**Skin:** Remove contaminated clothing and wash before reuse. Gently wash the contaminated area with plenty of soap and water for at least 15 minutes. If skin irritation or rash develops, get medical advice/attention.

**Inhalation:** Move person to fresh air. If not breathing clear airway and start cardiopulmonary resuscitation (CPR), avoid mouth-to-mouth; give artificial respiration and get medical attention. If respiratory irritation, dizziness, nausea occurs, get medical advice/attention.

**Ingestion:** Rinse mouth with water. Do not induce vomiting. Consult a physician.

### 4.2 Most important symptoms and effects

ACUTE No data available  
CHRONIC No data available

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

No data available



## SECTION 5: Fire Fighting Measures

Suitable extinguishing media:	Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media:	No Data Available.
Special hazards arising from mixture:	No Data Available.
Advice for firefighters:	Wear self-contained breathing apparatus and full protective gear while extinguishing the fire.

## SECTION 6: Accidental Release Measures

### 6.1 Personal precautions and protective equipment (PPE) and emergency procedures.

Depending on the extent of release, consider the need for trained firefighters/ emergency responders with adequate PPE for cleaning up. Keep unnecessary people away. Ensure adequate ventilation. Wear proper PPE. Do not touch or walk through spilled material.

### 6.2 Environmental precautions:

Prevent spills from entering storm sewers, drains or waterways. Prevent release to the environment.

### 6.3 Methods and material for containment and cleaning up.

How to contain spill:	Absorb onto inert material (i.e. sawdust or absorbent paper).
Cleaning-up methods:	Shovel/sweep up debris and store in a sealed plastic container for disposal.

Reference to other sections: See section 8 for further information on protective clothing and equipment, see section 13 for advice on waste disposal.

## SECTION 7: Handling and Storage

### 7.1 Safe handling

Precautions for safe handling:	Use appropriate personal protective equipment. Do not get in eyes or on skin, breathe vapors or mists. Ensure good ventilation. Remove contaminated clothing and protective equipment when leaving work areas.
General hygiene advice:	Use good industrial hygiene and safety practices. Wash hands before breaks, in use, and at the end of the workday.
Measures to prevent fire:	Not available
Measures to prevent aerosol/dust generation:	Not available
Measures to protect the environment:	Not available

## 7.2 Conditions for safe storage, including any incompatibilities.

Technical measures and storage conditions:	Store at -20°C in a freezer without a defrost cycle.
Packaging materials:	Store in original container.
Requirements for storage rooms and vessels:	Not available

## SECTION 8: Exposure controls/personal protection

### 8.1 Control Parameters

This product, as supplied, does not contain any hazardous substances with occupational exposure limits established by OSHA.

### 8.2 Engineering controls

Safety shower, eye wash station and ventilation systems.

### 8.3 Personal protection equipment

Eye/face protection:	Safety glasses with side shields or goggles approved by government standards such as NIOSH (US), CEN (EU) and WHMIS (CA) should be used.
Skin/body protection:	Wear lab coat.
Hand protection:	Latex, nitrile or rubber gloves should be worn when handling substance.
Respiratory protection:	Use in well ventilated areas. In case of insufficient ventilation, respirators should be used that have been tested and approved by appropriate government standards such as NIOSH.

### 8.4 General health & safety measures

Use clean laboratory practices and personal protection equipment

### 8.5 Environmental exposure controls

Do not let product enter drains.

## SECTION 9: Physical and Chemical Properties

### Information on basic physical and chemical properties

Physical state:	Liquid
Appearance/color	Clear
Odor:	Not available
Odor threshold:	Not available
pH:	Not available
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
Lower flammability/explosive limit:	Not available
Upper flammability/explosive limit:	Not available
Vapor pressure:	Not available
Vapor density:	Not available
Relative density:	Not available
Solubility:	Water soluble
Partition coefficient: n-octanol/water:	Unknown
Auto-ignition temperature:	Unknown
Decomposition temperature:	Unknown
Viscosity:	Unknown
Explosive properties:	Not available
Oxidizing properties:	Not available
Other information:	Not available

## SECTION 10: Stability and Reactivity

Reactivity	No data available.
Chemical stability:	The product is stable under normal storage conditions.
Possibility of hazardous reactions:	Under recommended conditions of storage and use, hazardous reactions should not occur.
Conditions to avoid:	No data available.
Incompatible materials:	Strong oxidizing agents.
Hazardous decomposition products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological Information

Likely routes of exposure: Inhalation, ingestion, eye and skin contact.

### 11.1 Acute effects

Eye: May cause irritation.  
Skin: May cause irritation.  
Inhalation: May cause irritation of respiratory tract.  
Ingestion: May be harmful if swallowed.  
Toxicity: Not available

STOT-single exposure: Not available  
Chronic health effects: Not available  
Carcinogenicity: Not available  
Germ cell mutagenicity: Not available  
Reproductive toxicity: Not available  
Developmental: Not available  
Fertility: Not available  
STOT-repeated exposure: Not available  
Aspiration hazard: Not available  
Other information: Not available

**IARC** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by the IARC.

**OSHA** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by the OSHA.

**NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by the NTP.

## SECTION 12: Ecological Information

### 12.1 Ecotoxicity

Acute toxicity: Not available  
Chronic toxicity: Not available  
Eco/aquatic toxicity: Not available

### 12.2 Persistence and Degradability

Abiotic degradation: Not available  
Physical- and photo-chemical elimination: Not available  
Biodegradation: Not available  
Bioaccumulative potential: Not available

### 12.3 Biological oxygen demand

Theoretical oxygen demand at 10 ppm:	Not available
Chemical oxygen demand at 10 ppm:	Not available
Biological oxygen demand-5 at 10 ppm:	Not available

### 12.4 Known or predicted distribution to environmental compartments

Surface tension:	Not available
Absorption/desorption:	Not available
Mobility in soil:	Not available

### 12.5 Results of PBT and vPvB assessment

PBT results:	Not available
PvB results:	Not available

### 12.6 Other adverse effects

Additional information:	Not available
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## SECTION 13: Disposal Considerations

### Waste treatment methods

Product/packaging disposal:	Dispose of material in accordance with all federal, state, and local regulations. Use a licensed professional waste disposal service to dispose of this product.
Waste codes/waste designations according to LoW:	Unknown
Waste treatment-relevant information:	Dispose of material in accordance with all federal, state, and local regulations.
Sewage disposal-relevant information:	Prevent material from entering drains, sewer and waterways.
Other disposal recommendations:	None

## SECTION 14: Transport Information

This product is not regulated by US Department of Transportation (DOT), ADR/RID (cross border) IMDG and IATA/ICAO.

UN number:	Not available
UN proper shipping name:	Not available
Transport hazard class(es):	Not available
Packing group:	Not available
Environmental hazards:	Not available
Special precautions for user:	Do not transport until safety precautions have been read and understood.

## SECTION 15: Regulatory Information

### 15.1 Occupational Safety and health Administration (OSHA) Hazards

Not listed

### 15.2 SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### 15.3 SARA 313 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

### 15.4 SARA311/312 Hazards

See section 2 for more information.

### 15.5 California Proposition 65

This product does not contain any chemicals known to the State of California to cause birth defects or other reproductive harm.

### 15.6 United States of America Toxic Substances Control Act (TSCA) List

Ingredients are not listed in the TSCA inventory; for research use only.

### 15.7 Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Ingredients are not listed.

### 15.8 European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified chemical Substances (ELINCS), and No Longer Polymers (NLP)

All ingredients except pseudouridine-5'-triphosphate and 5-methylcytidine-5' triphosphate are listed in inventory.

## **SECTION 16: Other Information**

### **16.1 Disclaimer**

The information provided on the SDS is the most accurate information to the best knowledge of CELLSCRIPT, LLC. at this time. The information provided within serves the purpose of guidance for safe handling, use, processing, storage, transportation, disposal, and release. This document should not be considered as a warranty or quality specification. The information relates only to the specific material designated and is not valid when used in combination with other materials or within a process. CELLSCRIPT, LLC. assumes no liability for damage resulting from handling or contact with this product.

### **16.2 Document Revision**

Last Revision Date: 03JUN2021