C-SRI6310K ScriptGuard™ RNase Inhibitor SDS Checklist

CELLSCRIPT™
RNA for Translation in Cells

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.
Other means of identification: None

1.2 Recommended Use and Restrictions on Use

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

1.3 Details of the Supplier of the Safety Data Sheet

Company	CELLSCRIPT™
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 8am-4pm CST

SECTION 2: Hazard(s) Identification

2.1 Classification of the Substance or Mixture

This product, as supplied, is not considered hazardous.

2.2 GHS Label elements, including precautionary statements

This product, as supplied, is not considered hazardous.

2.3 Hazards not otherwise classified

This product, as supplied, 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
ScriptGuard™ RNase Inhibitor	N/A	N/A	N/A	N/A
Glycerol	$C_3H_8O_3$	56-81-5	200-289-5	50%
2-Amino-2-(hydromethyl)-1,3-propanediol	$C_4H_{11}NO_3$	77-86-1	201-064-4	50 mM
Sodium chloride	NaCl	7647-14-5	231-598-3	100 mM
Dithiothreitol (DTT)	$C_4H_{10}O_2S_2$	3483-12-3	222-468-7	10 mM
Ethylenediaminetetraacetic acid (EDTA) Disodium Salt Dihydrate	$C_{10}H_{14}N_2O_8 \cdot 2H_2O$	6381-92-6	205-358-3	0.1 mM
Triton X-100	$C_{14}H_{22}O(C_2H_4O)_n$(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: Remove contact lenses, 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. If feeling unwell, get medical attention.

4.2 Most important symptoms and effects

ACUTE No data available
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 (see section 8). Ensure adequate ventilation. Avoid contact with skin and eyes.

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. 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:	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. Do not store at -70°C.
Packaging materials:	Store in original container.
Requirements for storage rooms and vessels:	Not available
Incompatible materials:	Strong oxidizing agents, bases, alkali metals, and reducing agents.

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^3, mist, respirable fraction 15 mg/m^3, mist, total particulate	CAL/OSHA PEL

Limit Types: Occupational exposure limits (OELs), permissible exposure limits (PELs), threshold limit values (TLVs) or time-weighted average (TWA).

TWA is a measurement of a worker's average exposure to a hazardous substance or airborne pollutant over a set period of time (e.g., 8 hr, 1 week).

8.2 Engineering controls

Safety shower, eye wash station and ventilation systems.

8.3 Personal protection equipment & measures

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 used 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.
Hygiene measures:	Handle in accordance with good industrial hygiene and safety practice.

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:	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 dangerous reactions known under normal storage and usage conditions.
Chemical stability:	Stable under normal recommended 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

11.1 Routes of Exposure

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

11.2 Potential Health Effects

Eye:	Not available
Skin:	Not available
Inhalation:	Not available
Ingestion:	Not available
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

11.3 Numerical measures of toxicity

No data available

11.4 Symptoms

Symptoms related to the physical, chemical, and toxicological characteristics:
No data 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:	None

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, as supplied, 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 Section 302.

15.3 SARA 313 Components

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

15.4 SARA 311/312 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

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

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™ 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™ assumes no liability for damage resulting from handling or contact with this product.

16.2 Document Revision

See the document footer for the last revision date.