

	<h1>Safety Data Sheet</h1>	Doc. No.:	100035-SDS 100037-SDS 100045-SDS 100047-SDS 111112-SDS
		Revision No.:	6.0
		Effective Date:	18Jan2024

Section 1: Identification

1.1 Product Identifier(s):

- Product/Material Name: P/N 100035, TELL-Seq™ Library Reagent Box 1 V1 RUO
- Product/Material Name: P/N 100037, TELL-Seq™ Library Reagent Box 1 HT24 V1 RUO
- Product/Material Name: P/N 100045, TELL-Seq™ Microbial Library Reagent Box 1 V1 RUO
- Product/Material Name: P/N 100047, TELL-Seq™ Microbial Library Reagent Box 1 HT V1 RUO
- Product/Material Name: P/N 111112, TELL-Seq™ Microbial HT96 Automation reagents RUO

1.2 Manufactured by:

Company: Universal Sequencing Technology
Address: 6155 Corte Del Cedro, Carlsbad, CA 92011
Phone Number(s): +1 857-999-0988
Website: www.universalsequencing.com

1.3 Identified uses of the product, material, or substance:

Recommended Use: This product is for research and development use only
Uses Advised Against: This product is NOT to be used in diagnostic procedures

Section 2: Hazard(s) Identification

2.1 Classification of Product/material

This product/material is considered not hazardous

2.2 Signal Words

None

2.3 Hazard Statement

There are no known hazards associated with this product/material

2.4 Hazard Symbols

None

2.5 Precautionary Statement(s)

None

2.6 Description of any Hazards not Otherwise Classified:

None

Section 3: Composition / Information of Ingredients

3.1 Substances:

General aqueous buffers, synthetic oligonucleotides, enzymes, Propylene Glycol, and Dimethyl Sulfoxide (DMSO). Only the DMSO carries any hazard warning in that its most significant occupational hazard is its ability to increase the absorption of other chemicals. With all the other products/materials in this kit being non-hazardous, this limits the risk.

3.2 Mixtures:

Salt Buffers, sugar solution, synthetic oligonucleotides in buffers, synthetic oligonucleotides attached to a substrate in buffer, and enzymes in buffers.

3.3 Chemicals with Trade Secret

No data available

Section 4: First Aid Measures

4.1 Description of First Aid Measures:

Eyes: in case of contact, immediately flush eyes with plenty of water. Get medical aid if irritation develops and persists.

Skin: in case of contact, flush skin with plenty of water. Get medical aid if irritation develops and persists.

Ingestion: if swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Rinse mouth with water.

Inhalation: if inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid

Notes to Physician: treat symptomatically and supportively

Section 5: Fire Fighting Measures

5.1 General Information:

As in any fire, wear a self-contained breathing apparatus in pressure demand, and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Combustible liquid and vapor. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas.

5.2 Extinguishing media:

Use water spray, dry chemical, carbon dioxide, or appropriate foam. Alcohol-resistant firefighting foam is recommended for use on all water-soluble liquids or polar solvent-type liquids.

5.3 Special Hazards Arising from Substances or Mixtures:

Carbon oxides, oxides of sulfur, formaldehyde, dimethyl sulfide

5.4 Further Information: (related to DMSO)

NFPA Rating: (estimated) Health: 2; Flammability: 2; Instability: 0

Flash Point: 87.8 deg C (190.04 deg F)

Autoignition Temperature: 215 deg C (419.00 deg F)

Explosion Limit, Lower: 2.6 vol %

Explosion Limit, Upper: 42 vol %

Section 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Use proper personal protective equipment as indicated in Section 8. Avoid dust formation, breathing vapors, mist or gas. Remove all ignition sources as added precaution.

6.2 Methods and Material used for Containment:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container away from any ignition source and provide ventilation.

Section 7: Handling and Storage

7.1 Precautions for Safe Handling

As a general precaution, always wear gloves when handling product/materials/chemicals in a laboratory/industrial setting. Handle in accordance with good industrial hygiene and safety practices. Follow Section 4's First Aid Measures if you come in contact with the product/material. Utilize standard good lab practices. Use in a well-ventilated area and wear standard PPE.

7.2 Conditions for Safe Storage:

Keep containers tightly closed and at the recommended storage temperatures.

Section 8: Exposure Controls / Personal Protection

8.1 Control Parameters:

Only the Propylene Glycol (CAS-No. 57-55-6) lists a control parameter, TWA of 10mg/m³

8.2 Engineering Controls:

Facilities storing or utilizing this product/material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

8.3 Personal Protective Equipment (PPE):

Eyes: wear eye protection, chemical splash goggles, safety glasses.

Skin: wear latex or nitrile gloves, lab coat, apron as necessary.

Inhalation: Respiratory protections not required.

Section 9: Physical and Chemical Properties

9.1 Information/Details on Basic Physical and Chemical Properties:

Physical State: All components within the kit are liquid at room temperature

Appearance: All components are clear, colorless liquids at room temperature.

Odor: one component, DMSO, has a very mild (practically odorless) odor

pH: where data is available, all materials are within pH of 7.0 – 8.5

Odor Threshold: No data available

Melting point/freezing point: -60°C (Propylene Glycol); 18.4°C (DMSO)

Initial boiling point and boiling range: 187°C (Propylene Glycol); 189°C (DMSO)

Flash Point: 103°C (Propylene Glycol); 87.8°C (DMSO)

Evaporation Rate: No data available

Flammability (solid, gas): No data available

Upper/lower flammability or explosive limit: U 12.5 %V, L 2.6%V (Propylene Glycol); U 42 %V, L 2.6%V (DMSO)

Vapor Pressure: 0.11 hPa at 20°C (Propylene Glycol); 0.46 mm HG at 20°C (DMSO)

Relative Density: 1.036 g/mL at 25°C (Propylene Glycol); 1.100g/mL (DMSO)

Solubility (ies): Soluble

Partition coefficient: n-octanol/water: log Pow: -0.8 at 25°C (Propylene Glycol)

Auto-ignition temperature: 215 deg C (DMSO)

Decomposition temperature: >189 deg C (DMSO)

Viscosity: No data available

Section 10: Stability and Reactivity

10.1 Reactivity:

This product is not reactive under normal storage and use conditions.

10.2 Chemical Stability:

Stable under recommended storage conditions. DMSO is hygroscopic: absorbs moisture or water from the air.

10.3 Possibility of Hazardous Reactions:

No data available

10.4 Conditions to Avoid:

Exposure to moisture, excessive heat and ignition sources

10.5 Incompatible Materials:

Strong acids, strong bases, oxidizing agents, acid chlorides, reducing agents, acid anhydrides, chloroformates

10.6 Hazardous Decomposition Products:

In the event of a fire see Section 5

Section 11: Toxicological Information

11.1 Likely Routes of Exposure:

The most likely routes of exposure are eye and skin contact. Exposures via inhalation or ingestion are less likely to occur.

11.2 Delayed and Immediate Effects or Chronic Effects from Short and Long-Term Exposure:

No data available

11.3 Numerical Measures of Toxicity:

No data available

11.4 Description of Symptoms:

Mild eye irritant, mild skin irritant

11.5 Carcinogenicity:

No material/component of this product is listed by IARC, OSHA, or NTP to be a potential carcinogen.

Section 12: Ecological Information

12.1 Ecotoxicity

Contains no substances known to be hazardous to the environment or that are not degradable in wastewater treatment plants. Do not empty into drains.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Dimethyl sulfoxide	EC50 96h 12350 – 25500 mg/L	40 g/L LC50 96 h 33-37 g/L LC50 96 h	= 16000 mg/L EC50 Pseudomonas putida 16 h	EC50 24h 7000 mg/L

			= 32 g/L EC50 Tetrahymena pyriformis 24 h = 77 mg/L EC50 Photobacterium phosphoreum 5 min	
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12.2 Persistence and Degradability

Persistence is unlikely

12.3 Bioaccumulation/ Accumulation

No information available.

12.4 Mobility

Will likely be mobile in the environment due to its water solubility.

Component	log Power
Dimethyl sulfoxide	-2.03

Section 13: Disposal Considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Section 14: Transport Information

14.1 Transport

DOT Not regulated

TDG Not regulated

IATA Not regulated

IMDG/IMO Not regulated

Section 15: Regulatory Information

15.1 Regulatory

All of the components in the product are on the following Inventory lists: X = listed

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Dimethyl Sulfoxide	X	X	-	200-664-3	-		X	X	X	X	X

Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance
R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
S - Indicates a substance that is identified in a proposed or final Significant New Use Rule
T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.
XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base
Production and Site Reports (40 CFR 710(B)).
Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

15.2 U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA Occupational Safety and Health Administration Not applicable

CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals

15.3 U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Dimethyl sulfoxide		X			

U.S. Department of Transportation

Reportable Quantity (RQ): N

DOT Marine Pollutant N

DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade Slight risk, Grade 1

Section 16: Other Information

Prepared By Quality Assurance

Universal Sequencing Technology

Email: quality@universalsequencing.com

Creation Date 02 SEP 2020

Revision Date 18 Jan 2024

Revision Summary This document has been updated to include product numbers, product names and update new company address.

Disclaimer

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product regarding appropriate safety precautions. It does not represent any guarantee of the properties of the product. It is not a warranty or quality specification. This information relates only to the specific material designated and may not be valid for use in combination with any other material or in any other process.

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