

SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - Europe

Rev A1: 23/07/2023

SECTION 1: Ide	ntification of the Substance and (Company/Undertaking	
1.1	Product Identifier		
	Product name:	egSEQ Enzymatic DNA Library Prep Kit v	2
	Cat. No.	EG1002	
	Specification	96rxn	
	Component Cat. No.	EG100201	Enhancer Buffer E
		EG100202	Fragment & ERA Buffer v2
		EG100203	Fragment & ERA Enzyme Mix v2
		EG100204	Adapter Ligation Buffer v2
		EG100205	Adapter Ligase v2
		EG100206	PCR Master Mix
1.2	Relevant identified uses of the s	ubstance and uses advised against	
	Identified Uses:	Analytical reagent	
	Restricted Uses:	For research use only. Not available for	diagnostic procedures.
	Mixture supplied to that use in form of:	Amixture	
	Product Category by type of chemical:	Analytical reagent	
1.3	Details of the supplier of the Safe	ety data Sheet	
		Edinburgh Genetics Limited	
	6 d d vo oo	Pentlands Science Park,	
	Address:	Penicuik, United Kingdom	
		EH26 OPZ	
	Telephone Number:	+44 1312616686	
	Email Address:	sales@eggenetics.com	
1.4	Emergency Telephone:	+44 1312616686	
SECTION 2: H	lazards Identification		
2.1	Classification of the mixture		
2.1.1	Emergency Overview	Enhanced Buffer E v2	

2.1.1	Emergency Overview	Enhanced Buffer E v2		
		Fragment & ERA Buffer v2		
		Fragment & ERA Enzyme Mix v2	Colourless, Liquid. H316-Causes mild skin irritation.	
		Ada Ligation Buffer v2	H320-Causes eye irritation.	
		Ada Ligase v2		
		PCR Master Mix		
	Classification according to			
2.1.2	Regulation (EC) No 1272/2008	Enhanced Buffer E v2		
	(including amendments):			
		Fragment & ERA Buffer v2	Category 3, Serious eye damage/eye	
		Fragment & ERA Enzyme Mix v2	irritation-Category 2B	
		Ada Ligation Buffer v2	<i><i><i>C</i>, <i>r</i></i></i>	
		Ada Ligase v2		
		PCR Master Mix		
	Classification according to EU			
2.1.3	Directive 67/548/EEC (including	Enhanced Buffer E v2		
	amendments):			
		Fragment & ERA Buffer v2	None	
		Fragment & ERA Enzyme Mix v2	None	
		Ada Ligation Buffer v2		
		Ada Ligase v2		
		PCR Master Mix		
2.2	Label elements:	Enhanced Buffer E v2		
		Fragment & ERA Buffer v2	None	
		Fragment & ERA Enzyme Mix v2	None	
		Ada Ligation Buffer v2		
		Ada Ligase v2]	

	PCR Master Mix	
Signal word:	Enhanced Buffer E v2	
	Fragment & ERA Buffer v2	<u> </u>
	Fragment & ERA Enzyme Mix v2	
	Ada Ligation Buffer v2	
	Ada Ligase v2	
	PCR Master Mix	
Hazard statements:	Enhanced Buffer E v2	
	Fragment & ERA Buffer v2	H316-Causes mild skin irritation
	Fragment & ERA Enzyme Mix v2	H320-Causes eye irritation.
	Ada Ligation Buffer v2	
	Ada Ligase v2	
	PCR Master Mix	
Precautionary statements:	Enhanced Buffer E v2	
	Fragment & ERA Buffer v2	
	Fragment & ERA Enzyme Mix v2	None
	Ada Ligation Buffer v2	
	Ada Ligase v2	
	PCR Master Mix	
Prevention:	Enhanced Buffer E v2	
	Fragment & ERA Buffer v2	P264-Wash hands thoroughly after
	Fragment & ERA Enzyme Mix v2	operation
	Ada Ligation Buffer v2	
	Ada Ligase v2	
	PCR Master Mix	
Disposal:	Enhanced Buffer E v2	
	Fragment & ERA Buffer v2	
	Fragment & ERA Enzyme Mix v2	
	Ada Ligation Buffer v2	N/A
	Ada Ligase v2	
	PCR Master Mix	
Storage:	Enhanced Buffer E v2	
	Fragment & ERA Buffer v2	
	Fragment & ERA Enzyme Mix v2	N/A
	Ada Ligation Buffer v2	
	Ada Ligase v2	
	PCR Master Mix	
Other Hazards:	The product is a mixture containing ingredients product s find the second strain of i	
Additional Information:	The product is not classified as hazard Regulations.	dous according to EC and National

SECTION 3: Composition / Information on Ingredients

3.1 Substances

2.3

2.4

ingreulents	
Enhanced Buffer E v2	Mixture
Fragment & ERA Buffer v2	Mixture
Fragment & ERA Enzyme Mix v2	Mixture
Ada Ligation Buffer v2	Mixture
Ada Ligase v2	Mixture
PCR Master Mix	Mixture

3.2 Composition

Product identifier type in accordance with Article 18(2) of Regulation (EC) No 1272/2008	Proportion	Identifiers	ECNumber
Ada Ligation Buffer v2			Classified 200-289-5
			Eye Irrit. 2, H319
Dithiothreitol	0.01 to 0.5	EC: 248-531-9	Acute Tox. 4, H302
Ditribuliento	0.01 10 0.5	CAS: 27565-41-9	Skin Irrit. 2, H315
			STOT SE 3, H335

Ada Ligase v2			
Glycerol	2 to 15	EC: 200-289-5 CAS: 56-81-5	Eye Irrit. 2, H319
PCR Master Mix			
Glycerol	2 to 15	EC: 200-289-5 CAS: 56-81-5	Eye Irrit. 2, H319
2-Amino-2-hydroxymethyl-1,3- propanediol	1 to 5	EC: 201-064-4 CAS: 77-86-1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

SECTION 4: First-Aid Measures

4.2

4.3

Notes to Physician

4.1 Description of First Aid Measures

Ingestion:	Wash mouth with water. Move exposed person to fresh air. Do not induce vomiting unless directed to do so by medical personnel. Never give anything b mouth to an unconscious person. If vomiting occurs, keep the head down to avoid vomit entering the lungs. Get medical attention if adverse health effects persist or are severe.
Skin contact:	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention if adverse health effects persist or are severe. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Eye contact:	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for a least 10 minutes. Get medical attention if irritation occurs.
Inhalation:	Move exposed person to fresh air. Get medical attention if adverse health effect persist or are severe.
First Aider Protection:	None specific
Most important symptoms and	effects, both acute and delayed
Potential acute health effect	s:
Enhanced Buffer E v2	Causes mild skin irritation. Causes eye irritation.
Fragment & ERA Buffer v2	Causes mild skin irritation. Causes eye irritation.
e ,	x v Causes mild skin irritation. Causes eye irritation.
Ada Ligation Buffer v2	Causes mild skin irritation. Causes eye irritation.
Ada Ligase v2 PCR Master Mix	Causes mild skin irritation. Causes eye irritation.
Over-exposure signs/sympto	Causes mild skin irritation. Causes eye irritation.
Enhanced Buffer E v2	Skin irritation and redness. Eye pain or irritation, tears and redness.
Fragment & ERA Buffer v2	Skin irritation and redness. Eye pain or irritation, tears and redness.
Fragment & ERA Enzyme Mix	κ v. Skin irritation and redness. Eye pain or irritation, tears and redness.
Ada Ligation Buffer v2	Skin irritation and redness. Eye pain or irritation, tears and redness.
Ada Ligase v2	Skin irritation and redness. Eye pain or irritation, tears and redness.
PCR Master Mix	Skin irritation and redness. Eye pain or irritation, tears and redness.
Indication of immediate medic	al attention and special treatment
needed	
Specific Treatments	
Enhanced Buffer E v2	None Specific
Fragment & ERA Buffer v2	None Specific
Fragment & ERA Enzyme Mix	
Ada Ligation Buffer v2	None Specific
Ada Ligase v2 PCR Master Mix	None Specific None Specific
PCR Master Mix	None speelite

Enhanced Buffer E v2	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Fragment & ERA Buffer v2	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Fragment & ERA Enzyme Mix	Treat symptomatically. Contact poison treatment specialist immediately if large y_i quantities have been ingested or inhaled.
Ada Ligation Buffer v2	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Ada Ligase v2	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
PCR Master Mix No action shall be taken involving	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. g any personal risk or without suitable training.

SECTION 5: Fire-Fighting Measures

5.1	Extinguishing media (small and large fires)	
	Small Fire:	Use an extinguishing agent suitable for the surrounding fire.
	Large Fire:	Use an extinguishing agent suitable for the surrounding fire.
	Avoid:	None
5.2.1	Specific Hazards:	In a fire or if heated, a pressure increase will occur and the container may burst
5.2.2	Protective equipment and advice for fire fighters:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental Release Measures

6.1	Personal precautions, protective equipment and emergency measures	
6.1.1	For non-emergency personnel: Enhanced Buffer E v2 Fragment & ERA Buffer v2 Fragment & ERA Enzyme Mix v Ada Ligation Buffer v2 Ada Ligase v2 PCR Master Mix For emergency responders:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
6.2	Enhanced Buffer E v2 Fragment & ERA Buffer v2 Fragment & ERA Enzyme Mix v. Ada Ligation Buffer v2 Ada Ligase v2 PCR Master Mix Environmental Precautions:	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment (see Section 8).
	Enhanced Buffer E v2 Fragment & ERA Buffer v2 Fragment & ERA Enzyme Mix v. Ada Ligation Buffer v2 Ada Ligase v2 PCR Master Mix	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
6.3	Ada Ligation Buffer v2 Ada Ligase v2 PCR Master Mix	stop leak if without risk. Move containers from spill area. Dilute with water and mop up. Dispose of via a licensed waste disposal contractor.
	andling and Storage	
7.1	Precautions for safe handling Enhanced Buffer E v2 Fragment & ERA Buffer v2 Fragment & ERA Enzyme Mix v Ada Ligation Buffer v2	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material kept tightly closed when not in use. Empty containers

Ada Ligase v2 PCR Master Mix Conditions for safe storage, incl	retain product residue and can be hazardous. Do not reuse container.
Enhanced Buffer E v2	Store in accordance with local regulations. Store in original container protected
Fragment & ERA Buffer v2	from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container
Fragment & ERA Enzyme Mix v	
Ada Ligation Buffer v2	must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental
Ada Ligase v2	contamination.
PCR Master Mix	
Specific end use(s) recommend	ations:
Enhanced Buffer E v2	
Fragment & ERA Buffer v2	
Fragment & ERA Enzyme Mix v. Ada Ligation Buffer v2 Ada Ligase v2	Industrial applications, Professional applications.

PCR Master Mix SECTION 8: Exposure Controls/Personal Protection

8.1 Control Parameters

7.2

7.3

Product/ingredient name	Component in the Kit	Exposure limit values
Enhanced Buffer E v2	N/A	N/A
Fragment & ERA Buffer v2	N/A	N/A
Fragment & ERA Enzyme Mix v	N/A	N/A
Ada Ligation Buffer v2	N/A	N/A
Ada Ligase v2	N/A	N/A
PCR Master Mix	N/A	N/A

8.2 Exposure controls

Appropriate engineering controls:	If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.	
Respiratory protection:	Wear medical protective mask.	
Hand protection:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products.	
Eye protection:	If contact is possible, the following protection should be worn: chemical splash goggles and/or face shield.	
Skin protection:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Generally, it is recommended to wear a white coat, disposable head cover and disposable shoe cover for protection.	
Environmental exposure controls:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.	

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

	Physical State:	
	Enhanced Buffer E v2	Liquid
	Fragment & ERA Buffer v2	Liquid
	Fragment & ERA Enzyme Mix v	Liquid
	Ada Ligation Buffer v2	Liquid
	Ada Ligase v2	Liquid
	PCR Master Mix	Liquid
9.2	Colour:	
	Enhanced Buffer E v2	Coulourless
	Fragment & ERA Buffer v2	Coulourless
	Fragment & ERA Enzyme Mix v	Coulourless
	Ada Ligation Buffer v2	Coulourless
	Ada Ligase v2	Coulourless
	PCR Master Mix	Coulourless
9.3	Odour:	
	Enhanced Buffer E v2	Odourless
	Fragment & ERA Buffer v2	Odourless

	Fragment & ERA Enzyme Mix v	Odourless
	Ada Ligation Buffer v2	Odourless
	Ada Ligase v2	Odourless
	PCR Master Mix	Irritating odour
9.4	Odour threshold:	N1 / A
	Enhanced Buffer E v2	N/A
	Fragment & ERA Buffer v2 Fragment & ERA Enzyme Mix v	N/A
	Ada Ligation Buffer v2	N/A
	Ada Ligase v2	N/A
	PCR Master Mix	,
9.5	pH:	
	Enhanced Buffer E v2	
	Fragment & ERA Buffer v2	
	Fragment & ERA Enzyme Mix v	N/A
	Ada Ligation Buffer v2	
	Ada Ligase v2	N/A
0.0	PCR Master Mix	N/A
9.6	Melting/Freezing point:	NI / A
	Enhanced Buffer E v2	N/A N/A
	Fragment & ERA Buffer v2 Fragment & ERA Enzyme Mix v	
	Ada Ligation Buffer v2	N/A
	Ada Ligase v2	N/A
	PCR Master Mix	N/A
	Initial boiling point and boiling	
9.7	range:	
	Enhanced Buffer E v2	100°C
	Fragment & ERA Buffer v2	N/A
	Fragment & ERA Enzyme Mix v	N/A
	Ada Ligation Buffer v2	N/A
	Ada Ligase v2	N/A
	PCR Master Mix	N/A
9.8	Flack naint.	
9.0	Flash point: Enhanced Buffer E v2	N/A
	Fragment & ERA Buffer v2	N/A
	Fragment & ERA Enzyme Mix v	
	Ada Ligation Buffer v2	N/A
	Ada Ligase v2	N/A
	PCR Master Mix	N/A
9.9	Evaporation rate:	
	Enhanced Buffer E v2	N/A
	Fragment & ERA Buffer v2	N/A
	Fragment & ERA Enzyme Mix v.	
	Ada Ligation Buffer v2	N/A N/A
	Ada Ligase v2 PCR Master Mix	N/A
9.1	Flammability:	N/A
5.2	Enhanced Buffer E v2	N/A
	Fragment & ERA Buffer v2	N/A
	Fragment & ERA Enzyme Mix v	-
	Ada Ligation Buffer v2	N/A
	Ada Ligase v2	N/A
	PCR Master Mix	N/A
	_	
9.11	Upper/lower flammability or	
	explosive limits:	N1 / A
	Enhanced Buffer E v2	N/A
	Fragment & ERA Buffer v2 Fragment & ERA Enzyme Mix v	N/A N/A
	Ada Ligation Buffer v2	N/A
	Ada Ligase v2	N/A
	PCR Master Mix	N/A
		-
9.12	Vapour pressure:	
	Enhanced Buffer E v2	N/A
	Fragment & ERA Buffer v2	N/A
	Fragment & ERA Enzyme Mix v	
	Ada Ligation Buffer v2	N/A
	Ada Ligase v2	N/A
	PCR Master Mix	N/A

7	.5	
7	.5	

7.6

9.13	Vapour density	
9.15	Enhanced Buffer E v2	N/A
	Fragment & ERA Buffer v2	N/A
	Fragment & ERA Enzyme Mix v	-
	Ada Ligation Buffer v2	N/A
	Ada Ligase v2	N/A
	PCR Master Mix	N/A
9.14	Relative vapour density (air=1):	
	Enhanced Buffer E v2	N/A
	Fragment & ERA Buffer v2	N/A
	Fragment & ERA Enzyme Mix v	N/A
	Ada Ligation Buffer v2	N/A
	Ada Ligase v2	N/A
	PCR Master Mix	N/A
9.15	Solubility:	Caludate in contrar
	Enhanced Buffer E v2	Soluble in water
	Fragment & ERA Buffer v2 Fragment & ERA Enzyme Mix v	Soluble in water
	Ada Ligation Buffer v2	Soluble in water
	Ada Ligase v2	Soluble in water
	PCR Master Mix	Soluble in water
	Partition coefficient (n-	
9.16	octanol/water):	
	Enhanced Buffer E v2	N/A
	Fragment & ERA Buffer v2	N/A
	Fragment & ERA Enzyme Mix v	N/A
	Ada Ligation Buffer v2	N/A
	Ada Ligase v2	N/A
0.17	PCR Master Mix Auto-ignition temperature:	N/A
9.17	Enhanced Buffer E v2	N/A
	Fragment & ERA Buffer v2	N/A
	Fragment & ERA Enzyme Mix v	
	Ada Ligation Buffer v2	N/A
	Ada Ligase v2	N/A
	PCR Master Mix	N/A
9.18	Decomposition temperature:	
	Enhanced Buffer E v2	N/A
	Fragment & ERA Buffer v2	N/A
	Fragment & ERA Enzyme Mix v Ada Ligation Buffer v2	N/A
	Ada Ligase v2	N/A
	PCR Master Mix	N/A
9.19	Viscosity:	
	Enhanced Buffer E v2	N/A
	Fragment & ERA Buffer v2	N/A
	Fragment & ERA Enzyme Mix v	N/A
	Ada Ligation Buffer v2	N/A
	Ada Ligase v2	N/A
	PCR Master Mix	N/A
SECTION 10. S	tability and Basativity	
SECTION TO. 5	tability and Reactivity	
10.1	Reactivity:	
	Enhanced Buffer E v2	Stable
	Fragment & ERA Buffer v2	Stable
	Fragment & ERA Enzyme Mix v	Stable
	Ada Ligation Buffer v2	Stable
	Ada Ligase v2	Stable
10.2	PCR Master Mix	Stable
10.2	Chemical stability: Enhanced Buffer E v2	Stable
	Fragment & ERA Buffer v2	Stable
	Fragment & ERA Enzyme Mix v	
	Ada Ligation Buffer v2	Stable
	Ada Ligase v2	Stable
	PCR Master Mix	Stable
10.2	Possibility of hazardous	
10.3	reactions:	
		Under normal conditions of storage and
	Fahrmand D. ff F. C	use, hazardous lreactions will not occur.
	Enhanced Buffer E v2	

		Under normal conditions of storage and use, hazardous Ireactions will not occur.
	Fragment & ERA Buffer v2	Under normal conditions of storage and use, hazardous Ireactions will not
	Fragment & ERA Enzyme Mix v	occur.
	Ada Ligation Buffer v2	Under normal conditions of storage and use, hazardous lreactions will not occur.
		Under normal conditions of storage and use, hazardous lreactions will not
	Ada Ligase v2	occur. Under normal conditions of storage and use, hazardous Ireactions will not
	PCR Master Mix	occur.
10.4	Conditions to Avoid:	
	Enhanced Buffer E v2	No specific data
	Fragment & ERA Buffer v2	No specific data
	Fragment & ERA Enzyme Mix v	No specific data
	Ada Ligation Buffer v2	No specific data
	Ada Ligase v2	No specific data
	PCR Master Mix	No specific data
10.5	Incompatible materials:	
	Enhanced Buffer E v2	No specific data
	Fragment & ERA Buffer v2	No specific data
	Fragment & ERA Enzyme Mix v	No specific data
	Ada Ligation Buffer v2	No specific data
	Ada Ligase v2	No specific data
	PCR Master Mix	No specific data
10.6	Hazardous decomposition products:	
	Enhanced Buffer E v2	Under normal conditions of storage and use, hazardous Idecomposition products should not be produced.
	Fragment & ERA Buffer v2	Under normal conditions of storage and use, hazardous Idecomposition products should not be produced.
	-	Under normal conditions of storage and use, hazardous Idecomposition
	Fragment & ERA Enzyme Mix v	products should not be produced. Under normal conditions of storage and
	Ada Ligation Buffer v2	use, hazardous Idecomposition products should not be produced. Under normal conditions of storage and
	Ada Ligase v2	use, hazardous Idecomposition products should not be produced. Under normal conditions of storage and
	DCP Master Mix	use, hazardous Idecomposition products should not be produced.
	PCR Master Mix : Toxicological Information	products should not be produced.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

Acute toxicity:

Product/ingredient name	Result	Species	Dose	Exposure
Ada Ligation Buffer v2				
Dithiothreitol	LD50 Skin	Mouse	333 mg/kg	/
Ada Ligase v2				
Glycerol	LD50 Oral	Rat	12600 mg/kg	/
PCR Master Mix				
Glycerol	LD50 Oral	Rat	12600 mg/kg	1
2-Amino-2-hydroxymethyl-1,3-propa	n LD50 Skin			
ediol	LD50 SKIN	Rat	>5000 mg/kg	/

11.2 Irritation/Corrosion

Product/ingredient name	Result	Species	Exposure
Ada Ligation Buffer			
Dithiothreitol	N/A	N/A	N/A
Ada Ligase			
Glycerol	Eyes - mild irritant	Rabbit	24 h 500 mg
	Skin - mild irritant	Rabbit	24 h 500 mg
PCR Master Mix			

Glycerol	Eyes - mild irritant	Rabbit	24 h 500 mg
	Skin - mild irritant	Rabbit	24 h 500 mg
2-Amino-2-hydroxymethyl-1,3-propan ediol	Skin - moderate irritant	Rabbit	0.25
	Skin - severe irritant	Rabbit	500 mg

11.3 Senitiser

11.5	Jenniger	
	Enhanced Buffer E v2	N/A
	Fragment & ERA Buffer v2	N/A
	Fragment & ERA Enzyme Mix v	N/A
	Ada Ligation Buffer v2	N/A
	Ada Ligase v2	N/A
	PCR Master Mix	N/A
11.4	Mutagenicity:	
	Enhanced Buffer E v2	N/A
	Fragment & ERA Buffer v2	N/A
	Fragment & ERA Enzyme Mix v	N/A
	Ada Ligation Buffer v2	N/A
	Ada Ligase v2	N/A
	PCR Master Mix	N/A
11.5	Carcinogenicity:	
	Enhanced Buffer E v2	N/A
	Fragment & ERA Buffer v2	N/A
	Fragment & ERA Enzyme Mix v	N/A
	Ada Ligation Buffer v2	N/A
	Ada Ligase v2	N/A
	PCR Master Mix	N/A
11.6	Reproductive toxicity:	
	Enhanced Buffer E v2	N/A
	Fragment & ERA Buffer v2	N/A
	Fragment & ERA Enzyme Mix v	N/A
	Ada Ligation Buffer v2	N/A
	Ada Ligase v2	N/A
	PCR Master Mix	N/A
	Specific target organ toxicity	
11.7	(single exposure):	
	Enhanced Buffer E v2	N/A
	Fragment & ERA Buffer v2	N/A
	Fragment & ERA Enzyme Mix v	N/A
	Ada Ligation Buffer v2	N/A
	Ada Ligase v2	N/A
	PCR Master Mix	N/A
11.8	Specific target organ toxicity	
11.0	(repeated exposure):	
	Enhanced Buffer E v2	N/A
	Fragment & ERA Buffer v2	N/A
	Fragment & ERA Enzyme Mix v	N/A
	Ada Ligation Buffer v2	N/A
	Ada Ligase v2	N/A
	PCR Master Mix	N/A
11.9	Aspiration hazard:	
	Enhanced Buffer E v2	N/A
	Fragment & ERA Buffer v2	N/A
	Fragment & ERA Enzyme Mix v	N/A
	Ada Ligation Buffer v2	N/A
	Ada Ligase v2	N/A
	PCR Master Mix	N/A
SECTION 12: E	cological Information	

12.1 Toxicity

2.1	loxicity

Product/ingredient name	Result	Species	Exposure
Ada Ligation Buffer v2			
Dithiothreitol	N/A	N/A	N/A
Ada Ligase v2			
		Fish -	
Glycerol	Acute EC50 >980 mg/L Fresh water	Oncorhynchus	
		mykiss	24 h 500 mg
PCR Master Mix			
		Fish -	
Glycerol	Acute EC50 >980 mg/L Fresh water	Oncorhynchus	
		mykiss	96h

2-Amino-2-hydroxymethyl-1,3-propan ediol	Acute EC50 >980 mg/L Fresh water	Daphnia	48h
	Acute NOEC 520 mg/L Fresh water	Daphnia	48h

12.2	Persistence and degradability:	N/A
12.3	Bioaccumulative potential:	N/A
12.4	Mobility in soil:	N/A
12.5	Results of PBT and vPvB assessment:	N/A
12.6	Other adverse effects:	N/A

SECTION 13: Disposal Considerations

Disposal of this product, solutions and a comply with the requirements of enviro legislation and any regional local author non-recyclable products via a licensed v not be disposed of untreated to the sew requirements of all authorities with juri recycled. Incineration or landfill should not feasible. This material and its contain Empty containers or liners may retain so spilt material and runoff and contact wi	ity requirements. Dispose of surplus and vaste disposal contractor. Waste should er unless fully compliant with the sdiction. Waste packaging should be only be considered when recycling is ver must be disposed of in a safe way. me product residues. Avoid dispersal of
--	---

SECTION 14: Transport Information

14.1 **Precautions for transportation:**

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

SECTION 15: Regulatory Information

Nation	Regulation	Information
International	Chemical Weapon Convention List Schedules	
memational	I, II & III Chemicals	Not listed.
International	Montreal Protocol (Annexes A, B, C, E)	Not listed.
International	Stockholm Convention on Persistent Organic	
mternational	Pollutants	Not listed.
International	Rotterdam Convention on Prior Inform	
memational	Consent (PIC)	Not listed.
International	UNECE Aarhus Protocol on POPs and Heavy	
International	Metals	Not listed.
	Regulation (EC) No 1907/2006 of the	All components
Europe	European Parliament and of the Council	are not listed in the
	(REACH)	list.
United States	Toxic Substances Control Act (TSCA)	Not listed.
		All components
United States	TSCA Chemical Substance Inventory	are not listed in the
		list.
	Act on the Evaluation of Chemical Substances	All components
Japan	and	are not listed in the
	Regulation of Their Manufacture, etc.	list.
		All
Turkey	Regulation on the Export and Import	components
Turkey	of Certain	are not listed
	Hazardous Chemicals	in the list.
		All
	Degulation of Degistration	
Turkey	Regulation of Registration,	components
	Evaluation, Authorization, and	are not listed
	Restriction of Chemicals (KKDIK)	in the list.
		All
China	Inventory of the Existing Chemical	components
Cimia	Substances in China	are listed or
	(IECSC)	exempted.
	Provisions on Environmental	· · · · · ·
China	Administration of New	
	Chemical Substances	Not listed.
		HOL IISLED.
China	Regulations on Safe Management	
China	of Hazardous	
	Chemicals in China	Not listed.

China	Catalog of Hazardous Chemicals	All components are not listed in the list.
China	Catalog of Goods Prohibited from Import	All components are not listed in the list.
China	Catalog of Goods Prohibited from Export	All components are not listed in the list.
China	China Inventory of Severely Restricted Toxic Chemicals	All components are not listed in the list.

SECTION 16: Other Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.Edinburgh Genetics Limited and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. ©2023 Edinburgh Genetics Ltd. All rights reserved.