EDINBURGH GENETICS

SAFETY DATA SHEET

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

Rev A3: 10/08/2023

SECTION 1: Identification of the Substance and Company/Undertaking

1.1 Product Identifier

Product name: egSEQ Hyb & Wash Kit (Module B)

Cat. No. EG1302 Specification 96rxn

Component Cat. No. EG130201 Binding Buffer

EG130202 Wash Buffer 1 EG130203 Wash Buffer 2

1.2 Relevant identified uses of the substance 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:

A mixture

Product Category by type of

chemical:

Analytical reagent

1.3 Details of the supplier of the Safety data Sheet

Edinburgh Genetics Limited

Address: Pentlands Science Park,

Penicuik, United Kingdom

EH26 OPZ

Telephone Number: +44 1312616686

Email Address: <u>info@eggenetics.com</u>

1.4 Emergency Telephone: +44 1312616686

SECTION 2: Hazards Identification

2.1 Classification of the mixture

2.1.1	Emergency Overview	Wash Buffer 1	
		Binding Buffer	Colourless, Liquid. No known significant effects or critical hazards.
		Wash Buffer 2	

	Classification according to
2.1.2	Regulation (EC) No 1272/2008
	(including amendments):

Wash Buffer 1	No known significant effects or critical hazards.
Binding Buffer	nazaras.
Wash Buffer 2	

2.1.3	GHS Hazard Category

Wash Buffer 1	No known significant effects or critical hazards.	
Binding Buffer		
Wash Buffer 2	1	

2.2 Label elements:

Hazard Pictogram:

Wash Buffer 1	
Binding Buffer	None
Wash Buffer 2	

Signal word:	Wash Buffer 1 Binding Buffer Wash Buffer 2	No signal word
Hazard statements:	Wash Buffer 1	No known significant effects or critical
	Binding Buffer	hazards.
	Wash Buffer 2	Hazarus.
Prevention:	Wash Buffer 1	
	Binding Buffer	N/A
	Wash Buffer 2	
	·	·
Response:	Wash Buffer 1	
	Binding Buffer	N/A
	Wash Buffer 2	
Disposal:	Wash Buffer 1	
	Binding Buffer	N/A
	Wash Buffer 2	
		•
Storage:	Wash Buffer 1	
	Binding Buffer	N/A
	Wash Buffer 2	

2.3 Other Hazards: N/A

SECTION 3: Composition / Information on Ingredients

3 1	Substances

Wash Buffer 1	Mixture
Binding Buffer	Mixture
Wash Buffer 2	Mixture

3.2 Composition

Product identifier type in accordance with Article 18(2) of Regulation (EC) No 1272/2008	Proportion	Identifiers	EC Number
Wash Buffer 1	<0.2	EC: 219-200-6	No hazards have been
		CAS: 2386-53-0	classified.
Dodecyl Sodium Sulfonate			
Binding Buffer			
Cadima ablanta	-10	EC: 231-598-3	F lands 2 11240
Sodium chloride	<10	CAS: 7647-14-5	Eye Irrit. 2, H319
Wash Buffer 2			
Dadasıl Cadium Culfanata		EC: 219-200-6	No hazards have been
Dodecyl Sodium Sulfonate	<0.2	CAS: 2386-53-0	classified.

SECTION 4: First-Aid Measures

Description of First Aid Measures 4.1

Wash Buffer 1 Binding Buffer Wash Buffer 2

Move exposed person to fresh air. Get medical attention if adverse health effects persist or are severe.

Ingestion:

Wash Buffer 1 Binding Buffer

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 by 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:

Wash Buffer 2

Wash Buffer 1

Flush contaminated skin with plenty of water. Remove contaminated clothing and Binding Buffer

shoes. Get medical attention if adverse health effects persist or are severe.

Wash Buffer 2

Eye Contact:

Wash Buffer 1 Immediately flush eyes with plenty of water, occasionally lifting the upper and lower Binding Buffer eyelids. Check for and remove any contact lenses. Get medical attention if irritation

Wash Buffer 2

First Aider Protection: None specific

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects:

Wash Buffer 1 No known significant effects or critical hazards.
Binding Buffer No known significant effects or critical hazards.
Wash Buffer 2 No known significant effects or critical hazards.

Over-exposure signs/symptoms:

Wash Buffer 1 No specific data.
Binding Buffer No specific data.
Wash Buffer 2 No specific data.

4.3 Indication of immediate medical attention and special treatment needed

Specific Treatments

Wash Buffer 1 None Specific
Binding Buffer None Specific
Wash Buffer 2 None Specific

Notes to Physician

Wash Buffer 1 Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Binding Buffer

Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Wash Buffer 2 Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

No action shall be taken involving 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

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

Protective equipment and advice for fire fighters:

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

5.2.2

6.1 Personal precautions, protective equipment and emergency measures

6.1.1 For non-emergency personnel:

Wash Buffer 1	No action shall be taken involving any personal risk or without suitable training.
Binding Buffer	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
Wash Buffer 2	inadequate. Put on appropriate personal protective equipment (see Section 8).

6.1.2 For emergency responders:

IWash Butter I	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
IRinding Ruffer	involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk
Mach Ruffor 2	through spilt material. Put on appropriate personal protective equipment (see Section 8).

6.2 Environmental Precautions:

Wash Buffer 1	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains
Binding Buffer	and sewers. Inform the relevant authorities if the product has caused environmental
Wash Buffer 2	pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up:

Wash Buffer 1	Stop leak if without risk. Move containers from spill area. Dilute with water and mop
I Rinding Rutter	up. Dispose of via a licensed waste disposal contractor.
Wash Buffer 2	Tup. Dispose of via a licensed waste disposal contractor.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Wash Buffer 1	
Binding Buffer	Put on appropriate personal protective equipment (see Section 8).
Wash Buffer 2	

7.2 Conditions for safe storage, including any incompatibilities:

	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully
Binding Buffer	
Wash Buffer 2	resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s) recommendations:

Wash Buffer 1	
Binding Buffer	Industrial applications, Professional applications.
Wash Buffer 2	

SECTION 8: Exposure Controls/Personal Protection

8.1 Control Parameters

Product/ingredient name	Component in the Kit	Exposure limit values
Wash Buffer 1	N/A	N/A
Binding Buffer	N/A	N/A
Wash Buffer 2	N/A	N/A

8.2 Exposure controls

Exposure controls		
Appropriate engineering controls: If user operations generate dust, fumes, gas, vapour or mist, use process enclosur exhaust ventilation or other engineering controls to keep worker exposure to airb 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 all times when handling chemical products.	
Eye protection:	If contact is possible, the following protection should be worn: chemical splash goggles an face shield.	
Personal protective equipment for the body should be selected based on the task be performed and the risks involved and should be approved by a specialist before ham product. Generally, it is recommended to wear a white coat, disposable head cover a 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 Sta	+~:

Wash Buffer 1	Liquid
Binding Buffer	Liquid
Wash Buffer 2	Liquid

9.2 Colour:

Wash Buffer 1	Coulourless
Binding Buffer	Coulourless
Wash Buffer 2	Coulourless

Odour: 9.3

Wash Buffer 1	Odourless
Binding Buffer	Odourless
Wash Buffer 2	Odourless

9.4 Odour threshold:

Wash Buffer 1	N/A
Binding Buffer	N/A
Wash Buffer 2	N/A

9.5 pH:

Wash Buffer 1	7.4 +/- 0.3
Binding Buffer	7.6 +/- 0.3
Wash Buffer 2	7.6 +/- 0.3

9.6 Melting/Freezing point:

Wash Buffer 1	N/A
Binding Buffer	N/A
Wash Buffer 2	N/A

Initial boiling point and boiling 9.7

range:

Wash Buffer 1	N/A
Binding Buffer	N/A
Wash Buffer 2	N/A

9.8 Flash point:

Wash Buffer 1	N/A
Binding Buffer	N/A
Wash Buffer 2	N/A

9.9 Evaporation rate:

Wash Buffer 1	N/A
Binding Buffer	N/A
Wash Buffer 2	N/A

9.1 Flammability:

Wash Buffer 1	N/A
Binding Buffer	N/A
Wash Buffer 2	N/A

Upper/lower flammability or 9.11

explosive limits:

Wash Buffer 1	N/A
Binding Buffer	N/A
Wash Buffer 2	N/A

9.12 Vapour pressure:

tupour pressure.	
Wash Buffer 1	N/A
Binding Buffer	N/A
Wash Buffer 2	N/A

9.13 Vapour density

Wa	sh Buffer 1	N/A
Bin	ding Buffer	N/A
Wa	ish Buffer 2	N/A

9.14 Relative vapour density (air=1):

Wash Buffer 1	N/A
Binding Buffer	N/A
Wash Buffer 2	N/A

9.15 Solubility:

Wash Buffer 1	Soluble in water
Binding Buffer	Soluble in water
Wash Buffer 2	Soluble in water

Partition coefficient (n-9.16

octanol/water):

Wash Buffer 1	N/A
Binding Buffer	N/A
Wash Buffer 2	N/A

9.17 Auto-ignition temperature:

Wash Buffer 1	N/A
Binding Buffer	N/A
Wash Buffer 2	N/A

9.18 Decomposition temperature:

Wash Buffer 1	N/A
Binding Buffer	N/A
Wash Buffer 2	N/A

9.19 Viscosity:

Wash Buffer 1	N/A	
Binding Buffer	N/A	
Wash Buffer 2	N/A	

SECTION 10: Stability and Reactivity

10.1 Reactivity:

Wash Buffer 1	Stable
Binding Buffer	Stable
Wash Buffer 2	Stable

10.2 Chemical stability:

Wash Buffer 1	Stable
Binding Buffer	Stable
Wash Buffer 2	Stable

Possibility of hazardous 10.3

reactions:

Wash Buffer 1	Under normal conditions of storage and
IRinding Rutter	use, hazardous lreactions will not occur.
Wash Buffer 2	use, nazardous ireactions will not occur.

Conditions to Avoid: 10.4

Conditions to Avoid.		
	Wash Buffer 1	
	Binding Buffer	No specific data
	Wash Buffer 2	

Incompatible materials: 10.5

meompatible materials.	
Wash Buffer 1	
Binding Buffer	No specific data
Wash Buffer 2	

Hazardous decomposition 10.6

products:

Wash Buffer 1	Under normal conditions of storage and
Binding Buffer	use, hazardous Idecomposition products
Wash Buffer 2	should not be produced.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

Acute toxicity:

Tital Control.				
Product/ingredient name	Result	Species	Dose	Exposure

Wash Buffer 1				
Dodecyl Sodium Sulfonate	LD50 Oral	Rat	1288 mg/kg	/
Binding Buffer				
Sodium chloride	LC50 Inhalation Dusts and mists	Rat	>42 g/m³	1h
	LD50 Oral	Rat	3000 mg/kg	/
Wash Buffer 2				
Dodecyl Sodium Sulfonate	LD50 Oral	Rat	1288 mg/kg	/

11.2 Irritation/Corrosion

Product/ingredient name	Result	Species	Exposure
Wash Buffer 1			
Dodecyl Sodium Sulfonate	N/A	N/A	N/A
Binding Buffer			
Sodium chloride	Eyes - Moderate irritant	Rabbit	24 h 100 mg
	Skin - Mild irritant	Rabbit	24 h 500 mg
Wash Buffer 2			
Dodecyl Sodium Sulfonate	N/A	N/A	N/A

Senitiser 11.3

Wash Buffer 1	
Binding Buffer	N/A
Wash Buffer 2	

11.4 Mutagenicity:

Wash Buffer 1	
Binding Buffer	N/A
Wash Buffer 2	

11.5 Carcinogenicity:

Wash Buffer 1	
Binding Buffer	N/A
Wash Buffer 2	

11.6 Reproductive toxicity:

Wash Buffer 1	
Binding Buffer	N/A
Wash Buffer 2	

Specific target organ toxicity 11.7

(single exposure):

Wash Buffer 1	
Binding Buffer	N/A
Wash Buffer 2	

Specific target organ toxicity (repeated exposure): 11.8

Wash Buffer 1	
Binding Buffer	N/A
Wash Buffer 2	

11.9 Aspiration hazard:

Wash Buffer 1	
Binding Buffer	N/A
Wash Buffer 2	

SECTION 12: Ecological Information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure	
Wash Buffer 1				
Dodecyl Sodium Sulfonate	N/A	N/A	N/A	
Binding Buffer				
Sodium chloride	Acute EC50 2430000 μg/L Fresh water	Algae - Navicula seminulum	96h	
	Acute EC50 28.85 mg/L Fresh water	Algae - Pseudokirchneriella subcapitata	72h	
	Acute EC50 519.6 mg/L Fresh water	Crustaceans - Cypris subglobosa	48h	
	Acute IC50 6.87 g/L Fresh water	Aquatic plants - Lemna minor	96h	

	7	Daphnia - Daphnia	1
	Acute LC50 1661 mg/L Fresh water	magna	48h
	A	Fish - Morone saxatilis	
	Acute LC50 1000000 μg/L Fresh water	- Larvae	96h
		Hyalella azteca;	
	Chronic LC10 781 mg/L Fresh water	Juvenile (Fledgling,	
		Hatchling, Weanling)	3 weeks
	Chronic NOEC 6 g/L Fresh water	Aquatic plants -	
	Cilionic NOEC 0 g/L Fresh water	Lemna minor	96h
	Chronic NOEC 0.314 g/L Fresh water	Daphnia - Daphnia	
	Chronic NOEC 0.314 g/L Fresh water	pulex	21d
		Fish - Gambusia	
	Chronic NOEC 100 mg/L Fresh water	holbrooki	
		-Adult	8 weeks
Wash Buffer 2			
Dodecyl Sodium Sulfonate	x	N/A	N/A

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

SECTION 13: Disposal Considerations

13.1 Waste treatment methods:

The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport Information

	UN number	UN proper shipping name	Transport hazard class(es)	Transport hazard symbol	Environmental hazards	Packing group
ADR/RID	UN3316	CHEMICAL KIT	9	₩	No.	II
IATA	UN3316	Chemical kit	9	₩.	No.	II
IMDG	UN3316	CHEMICAL KIT	9	₩.	No.	II

Always transport in closed containers that are upright and secure. Ensure that

14.1 Precautions for transportation: 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 I, II & III Chemicals	Not listed.
International	Montreal Protocol (Annexes A, B, C, E)	Not listed.
International	Stockholm Convention on Persistent Organic Pollutants	Not listed.
International	Rotterdam Convention on Prior Inform Consent (PIC)	Not listed.
International	UNECE Aarhus Protocol on POPs and Heavy Metals	Not listed.
Europe	Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH)	All components are not listed in the list.
United States	Toxic Substances Control Act (TSCA)	Not listed.
United States	TSCA Chemical Substance Inventory	All components are not listed in the list.
Japan	Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.	All components are not listed in the list.

	Regulation on the Export and Import of	
Turkey	Certain	All components are
	Hazardous Chemicals	not listed in the list.
	Regulation of Registration, Evaluation,	
Turkey	Authorization, and	All components are
	Restriction of Chemicals (KKDIK)	not listed in the list.
	Inventory of the Existing Chemical	
China	Substances in China	All components are
	(IECSC)	listed or exempted.
	Provisions on Environmental Administration	
China	of New	
	Chemical Substances	Not listed.
	Regulations on Safe Management of	
China	Hazardous	
	Chemicals in China	Not listed.
China		All components are
China	Catalog of Hazardous Chemicals	not listed in the list.
China		All components are
Criina	Catalog of Goods Prohibited from Import	not listed in the list.
China		All components are
Criina	Catalog of Goods Prohibited from Export	not listed in the list.
China	China Inventory of Severely Restricted Toxic	All components are
Cillia	Chemicals	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.