SAFETY DATA SHEET



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

Rev A3: 11/08/2023

SECTION 1: Identification of the Substance and Company/Undertaking

1.1 Product Identifier

Product name: egSEQ Hyb & Wash Kit (Module C, for Illumina)

Cat. No. EG1303S Specification 16rxn

Component Cat. No. EG130301S Post PCR Master Mix

EG130302S Post PCR Primer (25 μM, for Illumina)

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.

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

			Colourless, Liquid. H316-Causes mild
2.1.1	Emergency Overview	Post PCR Master Mix	skin irritation. H320-Causes eye
			irritation.

Post PCR Primer (25 µM, for Illumina) Colourless, Liquid. No known significant effects or critical hazards.

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

Post PCR Master Mix	Skin corrosion/irritation-Category 3 Serious eye damage/eye irritation-Category 2B
Post PCP Primer (25 µM, for Illumina)	No classified

2.1.3 GHS Hazard Category

Post PCR Master Mix	H316-Causes mild skin irritation. ——Skin corrosion/irritation-Category 3 H320-Causes eye irritation. ——Serious eye damage/eye irritation-Category 2B
Post PCR Primer (25 μM, for Illumina)	No classified

2.2 Label elements:

Hazard statements:

 Pictogram:
 Post PCR Master Mix
 No pictogram.

 Post PCR Primer (25 μM, for Illumina)
 No pictogram.

 Signal word:
 Post PCR Master Mix
 Warning.

 Post PCR Primer (25 μM, for Illumina)
 No signal word.

Post PCR Primer (25 μM, for Illumina) No signal word.

Post PCR Master Mix

H316-Causes mild skin irritation.
H320-Causes eye irritation.

Post PCR Primer (25 µM, for Illumina)

No known significant effects or critical hazards.

 Response:
 Post PCR Master Mix
 None

 Post PCR Primer (25 μM, for Illumina)
 None

P332 + P317-If skin irritation occurs: Ge medical help. P305 + P351 + P338-If in eyes: Immediately rinse with water for Post PCR Master Mix several minutes. Remove contact lenses, Prevention: if present and easy to do. Continue rinsing. P337 + P317-If eye irritation persists: Get medical help.

> Post PCR Primer (25 μM, for Illumina) N/A

Disposal: Post PCR Master Mix N/A

Post PCR Primer (25 μM, for Illumina) N/A

Storage: Post PCR Master Mix N/A Post PCR Primer (25 μM, for Illumina) N/A

N/A 2.3 Other Hazards:

Additional Information: The product is not classified as hazardous according to EC and National Regulations. 2.4

SECTION 3: Composition / Information on Ingredients

Substances Post PCR Master Mix Mixture 3.1 Post PCR Primer (25 μM, for Illumina) Mixture

3.2 Composition

Product/Ingredient name	Proportion (%)		Classification of Regulation (EC) No.1272/2008.
Post PCR Master mix			
Glycerol	I2 to 15	EC: 200-289-5 CAS: 56-81-5	Eye Irrit. 2, H319
2-Amino-2-hydroxymethyl-1,3-propa nediol	1 to 5	EC: 201-064-4	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
<u> </u>			

SECTION 4: First-Aid Measures

4.1 **Description of First Aid Measures**

Ingestion:

Wash mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If vomiting occurs, Post PCR Master Mix keep the head down to avoid vomit entering the lungs. Get medical attention if adverse

health effects persist or are severe.

Post PCR Primer (25 μ M, for

Illumina)

Wash out 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:

Flush contaminated skin with plenty of water. Remove contaminated clothing and Post PCR Master Mix

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

Post PCR Primer (25 µM, for

Illumina)

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.

Eve contact:

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower Post PCR Master Mix eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10

minutes. Get medical attention if irritation occurs.

Post PCR Primer (25 µM, for

Illumina)

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 at least 10 minutes. Get medical attention if irritation occurs.

Inhalation:

Move exposed person to fresh air. Get medical attention if adverse health effects Post PCR Master Mix

persist or are severe.

Post PCR Primer (25 µM, for

Illumina)

Move exposed person to fresh air. Get medical attention if adverse health effects

persist or are severe.

First Aider Protection: None specific

Most important symptoms and effects, both acute and delayed 42

Potential acute health effects:

Post PCR Master Mix No known significant effects or critical hazards. Post PCR Primer (25 uM. for Causes mild skin irritation. Causes eye irritation.

Illumina)

Over-exposure signs/symptoms:

Post PCR Master Mix No specific data.

Post PCR Primer (25 μ M, for Illumina)

Skin irritation and redness. Eye pain or irritation, tears and redness.

4.3 Indication of immediate medical attention and special treatment needed

Specific Treatments

Post PCR Master Mix None Specific Post PCR Primer (25 µM, for None Specific Illumina)

Notes to Physician

Treat symptomatically. Contact poison treatment specialist immediately if large Post PCR Master Mix

quantities have been ingested or inhaled.

Post PCR Primer (25 μM , for

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

Extinguishing media (small and large fires) 5.1

Use an extinguishing agent suitable for the surrounding fire. Small Fire:

Large Fire: Use an extinguishing agent suitable for the surrounding fire.

5.2.1 In a fire or if heated, a pressure increase will occur and the container may burst Specific Hazards:

Protective equipment and advice 5.2.2

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:

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from Post PCR Master Mix entering. Do not touch or walk through spilt material. Put on appropriate personal

protective equipment (see Section 8).

Post PCR Primer (25 uM. for

Illumina)

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).

6.1.2 For emergency responders:

If specialised clothing is required to deal with the spillage, take note of any information Post PCR Master Mix 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).

Post PCR Primer (25 µM, for

Illumina)

6.2 Environmental Precautions:

Post 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

Post PCR Primer (25 µM, for

Illumina)

pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up:

Post PCR Master Mix

Stop leak if without risk. Move containers from spill area. Dilute with water and mop

Post PCR Primer (25 μM, for up. Dispose of via a licensed waste disposal contractor.

Illumina)

SECTION 7: Handling and Storage

7.1 Precautions for safe handling - Protective measures:

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 retain product residue and can be hazardous.

Do not reuse container.

Post PCR Primer (25 μM , for

Post PCR Master Mix

Illumina)

Put on appropriate personal protective equipment (see Section 8).

7.2 Conditions for safe storage, including any incompatibilities:

Store in accordance with local regulations. Store in original container protected from Post PCR Master Mix

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 resealed and

Post PCR Primer (25 $\mu\text{M},$ for

Illumina)

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:

Post PCR Master Mix

Post PCR Primer (25 μ M, for

Industrial applications, Professional applications.

Illumina)

SECTION 8: Exposure Controls/Personal Protection

8.1 Control Parameters

Occupational exposure limits: 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:

Post PCR Master Mix Liquid Post PCR Primer (25 μ M, for Illumina) Liquid

9.2 Colour:

Post PCR Master Mix Coulourless

	Post PCR Primer (25 μM, for Illumina)	Coulourless
9.3	Odour:	
	Post PCR Master Mix	Irritating Odour
	Post PCR Primer (25 μ M, for	Odourless
	Illumina)	Cabaness
9.4	Odour threshold:	
9.4	Post PCR Master Mix	N/A
	Post PCR Primer (25 µM, for	
	Illumina)	N/A
9.5	pH:	
	Post PCR Master Mix Post PCR Primer (25 μM, for	N/A
	Illumina)	7.5
9.6	Melting/Freezing point:	
	Post PCR Master Mix	N/A
	Post PCR Primer (25 μM, for Illumina)	0°C
9.7	Initial boiling point and boiling	
	range:	A1/A
	Post PCR Master Mix Post PCR Primer (25 μM, for	N/A
	Illumina)	100°C
9.8	Flash point:	
	Post PCR Master Mix Post PCR Primer (25 μM, for	N/A
	Illumina)	N/A
9.9	Evaporation rate:	
	Post PCR Master Mix Post PCR Primer (25 μM, for	N/A
	Illumina)	N/A
9.1	Flammability:	
	Post PCR Master Mix Post PCR Primer (25 μM, for	N/A
	Illumina)	N/A
9.11	Upper/lower flammability or explosive limits:	
	Post PCR Master Mix	N/A
	Post PCR Primer (25 μM, for	N/A
	Illumina)	N/A
9.12	Vapour pressure:	
7.12	•	The main component of the reagent is water.
	Post PCR Master Mix	At 20 °C, the steam pressure of water is
	Post PCR Primer (25 µM, for	3.2kPa. At 50 °C, the vapor pressure of water
	Illumina)	is 12.3 kPa.
9.13	Vapour density	
	Post PCR Master Mix	N/A
	Post PCR Primer (25 μM , for	N/A
	Illumina)	•
9.14	Relative vapour density (air=1):	
	Post PCR Master Mix	N/A
	Post PCR Primer (25 μ M, for	N/A
	Illumina)	
9.15	Solubility:	
	Post PCR Master Mix	Soluble in water
	Post PCR Primer (25 µM, for	Soluble in water
	Illumina)	
0.16	Partition coefficient (n-	
9.16	octanol/water):	
	Post PCR Master Mix	N/A
	Post PCR Primer (25 μM, for Illumina)	N/A
	•	

9.17

Auto-ignition temperature:

Post PCR Master Mix N/A Post PCR Primer (25 μ M, for Illumina) N/A

9.18 **Decomposition temperature:**

Post PCR Master Mix N/A Post PCR Primer (25 μ M, for Illumina) N/A

9.19 Viscosity:

Post PCR Master Mix N/A Post PCR Primer (25 μ M, for Illumina) N/A

SECTION 10: Stability and Reactivity

10.1 Reactivity:

 $\begin{array}{ll} \text{Post PCR Master Mix} & \text{Stable} \\ \text{Post PCR Primer (25 } \mu\text{M, for} \\ \text{Illumina)} & \text{Stable} \end{array}$

10.2 Chemical stability:

Post PCR Master Mix Stable Post PCR Primer (25 μ M, for Illumina) Stable

10.3 Possibility of hazardous reactions:

Post PCR Master Mix Post PCR Primer (25 μ M, for

Illumina)

Under normal conditions of storage and use, hazardous Ireactions will not occur.

10.4 Conditions to Avoid:

Post PCR Master Mix No specific data Post PCR Primer (25 μ M, for Illumina) No specific data

10.5 Incompatible materials:

Post PCR Master Mix No specific data Post PCR Primer (25 μ M, for Illumina) No specific data

10.6 Hazardous decomposition

products:

Post PCR Master Mix Post PCR Primer (25 μ M, for Illumina)

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

Acute toxicity:

Acute toxicity.				
Product/ingredient name	Result	Species	Dose	Exposure
Post PCR Master Mix				
	LD50 Oral	Rat	12600 mg/kg	/
2-Amino-2-hydroxymethyl-1,3-propa	LD50 Skin	Rat	>5000 mg/kg	/

Irritation/Corrosion:

Product/ingredient name	Result	Species	Exposure
Post PCR Master Mix			
Glycerol	Eyes - Mild irritant	Rabbit	24h 500mg
	Skin - Mild irritant	Rabbit	24h 500mg
2-Amino-2-hydroxymethyl-1,3-propa nediol	Skin - Moderate irritant	Rabbit	0.25
	Skin - Severe irritant	Rabbit	500mg

Sensitiser:

Post PCR Master Mix N/A Post PCR Primer (25 μ M, for Illumina) N/A

Mutagenicity:

Post PCR Master Mix N/A

Post PCR Primer (25 μM, for

Illumina)

Carcinogenicity::

Post PCR Master Mix N/A Post PCR Primer (25 μ M, for Illumina) N/A

N/A

Reproductive toxicity:

Post PCR Master Mix N/A Post PCR Primer (25 μ M, for Illumina) N/A

Specific target organ toxicity (single exposure):

Post PCR Master Mix N/A Post PCR Primer (25 μ M, for Illumina) N/A

Specific target organ toxicity (repeated exposure):

Post PCR Master Mix N/A
Post PCR Primer (25 μM, for Illumina) N/A

Aspiration hazard:

Post PCR Master Mix N/A Post PCR Primer (25 μ M, for Illumina) N/A

SECTION 12: Ecological Information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure	
Post PCR Master Mix				
•	Acute LC50 54000 mg/L Fresh water	Fish -Oncorhynchus mykiss	96h	
2-Amino-2-hydroxymethyl-1,3-propa nediol	Acute EC50 >980 mg/L Fresh water	Daphnia	48h	
	Acute NOEC 520 mg/L Fresh water	Danhnia	48h	

12 2 Persistence and degradability: N/A 12.3 Bioaccumulative potential: N/A 12.4 Mobility in soil: N/A Results of PBT and vPvB 12.5 N/A assessment: 12.6 Other adverse effects: 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

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