SAFETY DATA SHEET



W3110 fhuA Electrocompetent Cells, Part Number 900800

1.1 Product identifier		
Product name	: W3110 fhuA Electrocompetent Cells, Part Number 900800	
Part no.	: 900800	
1.2 Relevant identified us	es of the substance or mixture and uses advised against	
Identified uses	: Analytical reagent.	
	100 x 0.1 ml W3110 fhuA electroporation competent cells	900800-41
Uses advised against	: None known.	
1.3 Details of the supplier	of the safety data sheet	
Agilent Technologies Deu	tschland GmbH	
Hewlett-Packard-Str. 8 76337 Waldbronn		
Germany		
0800 603 1000		
e-mail address of person	n : pdl-msds_author@agilent.com	
responsible for this SDS		
1.4 Emergency telephone	number	
Emergency telephone	: CHEMTREC®: +(44)-870-8200418	

SECTION 2: Hazards identification

operation)

2.1 Classification of the su	bstance or mixture				
Product definition	: Mixture				
Classification according to Not classified.	to Regulation (EC) No. 1272/2008 [CLP/GHS]				
The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.					
Ingredients of unknown toxicity	 Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 10 - 30% 				
Ingredients of unknown ecotoxicity	: Contains 2.3% of components with unknown hazards to the aquatic environment				
See Section 16 for the full to	ext of the H statements declared above.				

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements		
Signal word	:	No signal word.
Hazard statements	:	No known significant effects or critical hazards.
Precautionary statements		
Prevention	1	Not applicable.
Response	1	Not applicable.
Storage	:	Not applicable.
Disposal	:	Not applicable.
Supplemental label elements	:	Not applicable.

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SECTION 2: Hazards identification

: Not applicable.
<u>ments</u>
: Not applicable.
: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
: None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures	: Mixture				
Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
glycerol	REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≤10	Not classified.	-	[1]
			See Section 16 for the full text of the H statements declared above.		

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Туре

[1] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact	mediately flush eyes with plenty of water, occasionally lifting the upper a elids. Check for and remove any contact lenses. Get medical attentior curs.	
Inhalation	emove victim to fresh air and keep at rest in a position comfortable for b edical attention if symptoms occur.	reathing. Get
Skin contact	ush contaminated skin with plenty of water. Remove contaminated cloth oes. Get medical attention if symptoms occur.	ning and
Ingestion	ash out mouth with water. If material has been swallowed and the expo nscious, give small quantities of water to drink. Do not induce vomiting ected to do so by medical personnel. Get medical attention if symptom	unless
Protection of first-aiders	action shall be taken involving any personal risk or without suitable tra	ining.

4.2 Most important symptoms and effects, both acute and delayed <u>Potential acute health effects</u>

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SECTION 4: First aid measures

Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Over-exposure sign	<u>s/symptoms</u>
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large
	quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
5.2 Special hazards arising	from the substance or mixture
Hazards from the substance or mixture	: In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous combustion products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide
5.3 Advice for firefighters	
Special precautions 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.
Special protective equipment for fire- fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions	s, protective equipment and emergency procedures
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 entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
For emergency responders	: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions	 Avoid dispersal of spilt 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 Methods and material for containment and cleaning up

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SECTION 6: Accidental release measures

Methods for cleaning up	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
6.4 Reference to other sections	: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

	5
Protective measures	: Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	: Potentially biohazardous material. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Storage : 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 resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s) Recommendations

: Industrial applications, Professional applications.

Industrial sector specific solutions

: Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
	NAOSH (Ireland, 5/2021). Notes: Advisory Occupational Exposure Limit Values (OELVs) OELV: 10 mg/m³ 8 hours. Form: mist

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

No DNELs/DMELs available.

PNECs

SECTION 8: Exposure controls/personal protection

No PNECs available

8.2 Exposure controls		
Appropriate engineering controls	:	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Individual protection measu	ure	<u>S</u>
Hygiene measures	:	Handle as biohazard material (Biosafety level 1). Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection		
Hand protection	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Body 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.
Other skin protection	:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	:	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
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

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

	-	
Appearance		
Physical state	:	Liquid.
Colour	:	Not available.
Odour	1	Not available.
Odour threshold	:	Not available.
Melting point/freezing point	:	Not available.
Initial boiling point and boiling range	:	Not available.
Flammability	:	Not applicable.
Upper/lower flammability or explosive limits	:	Not available.
Flash point	1	
		Ingredient name
		glycerol

Flash point		Clo	osed cup	C	Open cup
	Ingredient name	°C	Method	°C	Method
	glycerol	-	-	177	-
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Auto-ignition		Ingredient name			٥	C		Method	
temperature		glycerol			37	0	-		
Decomposition temperature	:	Not available.							
рН	1	Not available.							
Viscosity	:	Not available.							
Solubility(ies)	1	Media				Resu	esult		
		water				Soluble			
Miscible with water	:	Yes.	Yes.						
Partition coefficient: n- octanol/water	:	Not applicable.							
Vapour pressure		Vapour Pressure at 20°			e at 20°C	C Vapour pressure at 50°			
		Ingredient name	mm Hg	kPa	Method		mm Hg	kPa	Method
		water	17.5	2.3	-	ç	92.258	12.3	-
		glycerol	0.000075	0.00001	-	C	0.0025	0.00033	-
		Not available.							
Evaporation rate	1	Not available.							
	- 1								
Relative density	- 1	Not available.							
Evaporation rate Relative density Vapour density Explosive properties	:	Not available. Not available.							
Relative density Vapour density		Not available. Not available.							

9.2 Other information

Median particle size

No additional information.

SECTION 10: Stability and reactivity

: Not applicable.

10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: The product is stable.
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: No specific data.
10.5 Incompatible materials	: May react or be incompatible with oxidising materials.
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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SECTION 11: Toxicological information

SECTION 11: TOXI	cological information
11.1 Information on toxic	ological effects
Acute toxicity	
Not available.	
Acute toxicity estimate	s
N/A	<u>×</u>
Irritation/Corrosion	
Conclusion/Summary	: Not available.
<u>Sensitiser</u>	
Conclusion/Summary	: Not available.
Mutagenicity	
Conclusion/Summary	: Not available.
Carcinogenicity	: Not available.
Conclusion/Summary	: Not available.
Reproductive toxicity	: Not available.
Conclusion/Summary <u>Teratogenicity</u>	. Not available.
Conclusion/Summary	: Not available.
Specific target organ to:	
Not available.	
	<u>kicity (repeated exposure)</u>
Not available.	
Aspiration hazard	
Not available.	
Information on likely	: Not available.
routes of exposure	
Potential acute health ef	<u>fects</u>
Inhalation	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Eye contact	: No known significant effects or critical hazards.
Symptoms related to the	e physical, chemical and toxicological characteristics
Inhalation	: No specific data.
Ingestion	: No specific data.
Skin contact	: No specific data.
Eye contact	: No specific data.
Delayed and immediate	<u>effects as well as chronic effects from short and long-term exposure</u>
Short term exposure	
Potential immediate	: Not available.
effects	
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate	: Not available.
effects	
Potential delayed	: Not available.
effects	
Potential chronic health	<u>effects</u>
Conclusion/Summary	: Not available.
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SECTION 11: Toxicological information

General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Not available.

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

Soil/water partition coefficient (Koc)	: Not available.
Mobility	: Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment met	hods
Product	
Methods of disposal	: 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.
Hazardous waste	: Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.
Packaging	
Methods of disposal	: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
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SECTION 13: Disposal considerations

Special precautions

: 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

	ADR/RID	IMDG	IATA
14.1 UN number or ID number	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-
14.3 Transport hazard class(es)	-	-	-
14.4 Packing group	-		
14.5 Environmental hazards	No.	No.	No.

Additional information

14.6 Special precautions for user

: **Transport within user's premises:** 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.

14.7 Transport in bulk : Not available. according to IMO instruments

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU Regulation (EC) No. 1907/2006 (REACH)</u>

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

No listed substance

Label : Not

: Not applicable.

Other EU regulations

Ozone depleting substances (1005/2009/EU) Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants Not listed.

Seveso Directive

SECTION 15: Regulatory information

This product is not controlled under the Seveso Directive.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list	
Australia	: All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: All components are listed or exempted.
Eurasian Economic Union	: Russian Federation inventory: All components are listed or exempted.
Japan	: Japan inventory (CSCL): All components are listed or exempted. Japan inventory (ISHL): All components are listed or exempted.
New Zealand	: All components are listed or exempted.
Philippines	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: All components are listed or exempted.
Thailand	: All components are listed or exempted.
Turkey	: All components are listed or exempted.
United States	: All components are active or exempted.
Viet Nam	: All components are listed or exempted.
15.2 Chemical safety	: This product contains substances for which Chemical Safety Assessments might s

assessment

ssments might still be required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and	: ATE = Acute Toxicity Estimate
acronyms	CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.
	1272/2008]
	DMEL = Derived Minimal Effect Level
	DNEL = Derived No Effect Level
	EUH statement = CLP-specific Hazard statement
	N/A = Not available
	PBT = Persistent, Bioaccumulative and Toxic
	PNEC = Predicted No Effect Concentration
	RRN = REACH Registration Number
	vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Not classified.	

Full text of abbreviated H statements

Not applicable.

SECTION 16: Other information

Full text of classifications [CLP/GHS]			
Not applicable.			
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Notice to reader			

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