

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH), Annex II

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1 Product identifier**
 Trade name Discovery Array – Sengenics Custom
 Reference No. 990002
- 1.2 Relevant identified uses of the substance or mixture and uses advised against**
 Identified use(s) Analytical reagent. For research use only.
- 1.3 Details of the supplier of the safety data sheet**
 Company Identification Sengenics
 Oxford Genomics UK Ltd
 13A The Square Oxford
 United Kingdom OX2 9LJ
- Telephone USA: +1 650 273 4770 / UK: +44 1865 589 888
 E-Mail (competent person) enquiries@sengenics.com
- 1.4 Emergency telephone number**
 Emergency Phone No.

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture**
Regulation (EC) No. 1272/2008 (CLP) Not classified as hazardous.
Directive 67/548/EEC & Directive 1999/45/EC Not classified as dangerous for supply/use.
OSHA Hazard Communication Standard 29 CFR 1910.1200 (HazCom 2012) / GHS Not classified as hazardous.
- 2.2 Label elements** No measures required.
- 2.3 Other hazards** None anticipated.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- 3.2 Mixtures**
 Description: Microarray slide containing immobilised human recombinant proteins immersed in a glycerol water mixture solution

Dangerous components:
 EC Classification No. 1272/2008 / GHS

Hazardous ingredient(s)	%W/W	EC No.	CAS No.	Classification code: Hazard statement(s)
Glycerol	60	200-289-5	56-81-5	-

EC Classification No. 67/548/EEC

Hazardous ingredient(s)	%W/W	EC No.	CAS No.	EC Classification and Risk Phrases
Glycerol	60	200-289-5	56-81-5	-

- 3.3 Additional Information** See Section: 8, Occupational Exposure Limits
 The constructs used in production do not have the necessary elements required for mammalian cell expression, nor do they have any recognised method of being transferred to and expressed within a mammalian cell from its current host.

Expressed proteins are too large to be absorbed through the

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gut wall intact and are too large to passively diffuse through cell membranes.

The organisms used in production are not associated with any environmentally damaging effects. The overall risk of causing harm to the environment is effectively zero.

The risk to human health and environmental safety with respect to the above materials is extremely small.

SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation

Skin Contact

Eye Contact

Ingestion

Supply fresh air; consult doctor in case of complaint.

Wash skin with soap and water. Remove contaminated clothing and wash clothing before reuse.

Rinse cautiously with water for several minutes. Consult a doctor in case of complaint.

Wash out mouth with water. Consult a doctor in case of complaint.

4.2 Most important symptoms and effects, both acute and delayed

None anticipated.

4.3 Indication of the immediate medical attention and special treatment needed

None known.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released: Carbon oxides (CO_x), nitrogen oxides (NO_x), sulphur oxides (SO_x).

5.3 Advice for fire-fighters

Use fire-extinguishing methods suitable to surrounding conditions.

Wear full protective suit and self-contained breathing apparatus (SCBA) when extinguishing fires.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Refer to Section 8 for protective measures when handling the spillage.

6.2 Environmental precautions

No special requirements.

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (paper towelling, sand, diatomite, acid binders, universal binders, sawdust). Dispose of contaminated material as waste according to Section 13. Rinse off area with water.

6.4 Reference to other sections

8, 13

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with the eyes, skin and mucous membranes. Keep out of reach of children. Wash hands before breaks and after work.

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- 7.2 Conditions for safe storage, including any incompatibilities** Store in the original container at -20 °C.
- 7.3 Specific end use(s)** Use as per instructions for use. For professional use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters**
8.1.1 Occupational Exposure Limits

SUBSTANCE.	CAS No.	Source	LTEL (8 hr TWA mg/m ³)
Glycerol (mist)	56-81-5	UK WEL / Irl OELV	10

- 8.2 Exposure controls**

- 8.2.1 Appropriate engineering controls**

Not relevant for this material.

- 8.2.2 Personal protection equipment**

Eye/face protection

Safety glasses recommended. (EN166)

Hand protection

Disposable gloves. (EN374).



Material of gloves:

Latex / natural rubber, Nitrile rubber.

Penetration time of glove material:

Gloves resistance is not critical when the product is handled according to the instructions for use.

Body protection

Laboratory coat.

Respiratory protection

Not normally required.

- 8.2.3 Environmental Exposure Controls**

No special measures are required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 Information on basic physical and chemical properties**

Appearance

Pair of clear glass slides immersed in a clear liquid.

Colour

Colourless.

Odour

Pungent

Odour Threshold (ppm)

Not determined.

pH (Value)

7.6

Melting Point (°C) / Freezing Point (°C)

Not determined.

Boiling point/boiling range (°C):

Not determined.

Flash Point (°C)

Not determined.

Evaporation rate (BA = 1)

Not determined.

Flammability (solid, gas)

Not applicable.

Explosive limit ranges

Not applicable.

Vapour Pressure (mm Hg)

Not determined.

Vapour Density (Air=1)

Not determined.

Density (g/ml)

Not determined.

Solubility (Water)

Soluble.

Solubility (Other)

Not determined.

Partition Coefficient (n-Octanol/water)

Not determined.

Auto Ignition Temperature (°C)

Not determined.

Decomposition Temperature (°C)

Not determined.

Viscosity (mPa.s)

Not determined.

Explosive properties

Not explosive.

Oxidising properties

Not oxidising

- 9.2 Other information**

Not available.

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SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	None known.
10.2 Chemical stability	The product is stable in accordance with the recommended storage conditions.
10.3 Possibility of hazardous reactions	None known. Hazardous polymerisation will not occur.
10.4 Conditions to avoid	None.
10.5 Incompatible materials	None known.
10.6 Hazardous Decomposition Product(s)	None known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

11.1.2 Mixtures

Acute toxicity	Based upon the available data, the classification criteria are not met.
Irritation	Based upon the available data, the classification criteria are not met.
Corrosivity	Based upon the available data, the classification criteria are not met.
Sensitisation	Based upon the available data, the classification criteria are not met.
Repeated dose toxicity	Based upon the available data, the classification criteria are not met.
Carcinogenicity	Based upon the available data, the classification criteria are not met.
Mutagenicity	Based upon the available data, the classification criteria are not met.
Toxicity for reproduction	Based upon the available data, the classification criteria are not met.
STOT-single exposure	Based upon the available data, the classification criteria are not met.
STOT-repeated exposure	Based upon the available data, the classification criteria are not met.
Aspiration hazard	Based upon the available data, the classification criteria are not met.

11.2 Other information Not applicable

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	The product does not contain significant quantities of ingredients that are environmentally toxic.
12.2 Persistence and degradability	The organic components are substantially biodegradable
12.3 Bioaccumulative potential	None anticipated.
12.4 Mobility in soil	The product is predicted to have high mobility in soil.
12.5 Results of PBT and vPvB assessment	Not applicable.
12.6 Other adverse effects	Not applicable.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods	
Product:	Chemical residues and remains should be routinely handled as special waste. Used arrays should be treated as

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potentially infectious material. This must be disposed of in compliance with anti-pollution and other laws of the country concerned. To ensure compliance we recommend that you contact the relevant (local) authorities and/or an approved waste-disposal company for information.

European waste catalogue: 180107 & 180103*

Packaging: Disposal should be in accordance with local, state or national legislation.
Contaminated packaging must be disposed of in the same manner as the product.
Non-contaminated packaging materials may be recycled.
Contact your local service providers for further information.

SECTION 14: TRANSPORT INFORMATION

14.1	UN number	Not applicable
14.2	UN Proper Shipping Name	Not applicable
14.3	Transport hazard class(es)	Not classified as dangerous for transport.
14.4	Packing Group	Not applicable
14.5	Environmental hazards	Not applicable
14.6	Special precautions for user	Not applicable
14.7	Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable

SECTION 15: REGULATORY INFORMATION

15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture	Regulation (EC) No. 1907/2006 (REACH), Annex II OSHA Hazard Communication Standard 29 CFR 1910.1200
	Carcinogen listings	
	IARC:	None of the ingredients is listed.
	NTP:	None of the ingredients is listed.
	ACGIH:	None of the ingredients is listed.
	OSHA:	None of the ingredients is listed.
	EPA:	None of the ingredients is listed.
	Californian Proposition 65	
	Chemicals known to cause cancer:	None of the ingredients is listed.
	Chemicals known to cause reproductive toxicity:	None of the ingredients is listed.
	SARA	
	Section 355 (extremely hazardous substances):	None of the ingredients is listed.
	Section 313 (specific toxic chemical listings):	None of the ingredients is listed.
15.2	Chemical Safety Assessment	Not applicable.

SECTION 16: OTHER INFORMATION

LEGEND

STOT Specific Target Organ Toxicity

References:

Raw material safety data sheets.

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Additional Information

Prepared by: Sengenics

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To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.