

Production description

Zimmer and Peacock's glycerol sensors can be used in sensing the glycerol in different mediums with samples added to the electrodes area.



Sensor product code: ZPS GLY-000-00186

Specifications

The glycerol biosensor shows a linear range for 10 to 400 μ M with a sensitivity of 1.4 nA/ μ M (n=12).

Substrate	PET
Reference Electrode	Silver/Silver Chloride (60/40)
Working electrode	Carbon
Counter Electrode	Silver/Silver Chloride
	(60/40)

Performance



ZP recommends the ZP Glycerol meter when using our sensors.

The meter has a cable to be connected to a computer, which hosts the glycerol app specific for glycerol sensing. The app stores the data locally on your computer, but will also send the data automatically to Djuli. Djuli stores the raw data and allows us to improve the signal extraction algorithm as more data are collected.



Scan the QR-code for videos on how to use ZP sensors!



Glycerol Sensor

Procedure

Preparation of activation solution:

Add 20µL of the ZP Sample Diluent (ZPCH 900-000-00530) to dissolve the ZP Glycerol activation reagent (ZPCH 900-000-00531).

Testing procedure

- 1. Connect the ZP meter to your computer using an USB cable. Install the glycerol app and run the software. Follow the instructions on the screen.
- 2. Insert a ZP Glycerol biosensor and apply 40μL of analyte to the surface of the biosensor, ensuring that all electrodes are covered by the analyte.
- 3. The software will run the sample. This is to polarize the biosensor.
- 4. Once the polarization step of the analyte is completed, spike and mix the analyte with 2μL of the activation solution prepared above. Avoid touching the surface of the electrodes.
- 5. Run the software again to record the amperometric signal.
- 6. Discard the analyte and the biosensor safely.

Storage

Storage: Room temperature, 20 - 50% RH. Protect from exposure to UV-light Shelf life of sensor is not studied nor specified.

Disclaimer

Take caution when handling the sensors as the edges and corners are sharp, hence ZP recommends using PPE and wearing gloves.

This product is not tested for biocompatibility and ZP takes no responsibility for in-vivo usage.

This product is not suitable for food applications, please contact ZP for discussing your application.

This product is intended to be used in aqueous systems.

Production description

Zimmer and Peacock can also make customized sensors with the option to target other analytes than those listed in this datasheet. We can offer different electrode configurations, geometry, and materials. Please contact us through the contact form on <u>www.zimmerpeacock.com</u> or by e-mail on <u>sales@zimmerpeacock.com</u> for questions regarding customized sensors.