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Glucose Oxidase BIOSENSOR

Type: AC1.GOD

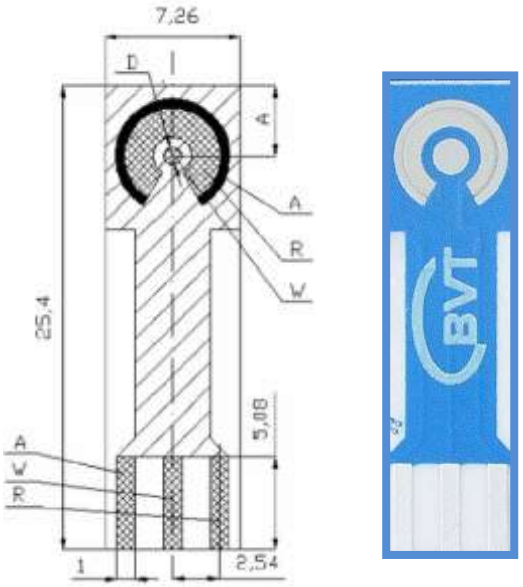
Description

Glucose Oxidase (GOD) from *Aspergillus Niger* is immobilized on the active surface of a working electrode of amperometric substrate AC1.W2.RS. The diameter of the immobilized bioactive membrane is 2 mm and the mean applied activity is 1 unit/mm^2.

Physical parameters

Dimensions:	
Weight:	0.5 gms
Length:	25.40 mm
Width:	7.26 mm
Thickness:	0.63 mm

A = 4.00 mm
D_W = 1.00 mm



Electrode Materials are defined by:

AC1.W2.RS

W ... Working electrode – pure platinum
R ... Reference electrode – silver (Detailed description of sensor: datasheet **AC1.W*.R* (*)**)

Enzymatic membrane containing cca 1 IU of GOD enzyme is immobilized on the working electrode surface.

Unit definition Glucose Oxidase from *Aspergillus Niger*:

- GOD
- ß-D-Glucose: oxygen 1-oxidoreductase
- Sigma – type X-S
- One unit will oxidize 1.0 µmole of ß-D-glucose to D-gluconolactone and H_2O_2 per min at pH = 5.1 at 35°C, equivalent to an O_2 uptake of 22.4 µl per min.

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Connector types for AC1.GOD sensors range

	KA1	KA1C	KA1S	KA4
AC1.GOD	✓	✓	✓	✓

Evaluation Unit

- PalmSense

Sensor Usage

- Measurement of ß-D-Glucose concentration

References

- J. Kulys, H.E. Hansen, Carbon-paste biosensors array for long-term glucose measurement, *Biosensors and Bioelectronics*, Volume 9, Issue 7, 1994, 491-500, ISSN 0956-5663, https://doi.org/10.1016/0956-5663(94)90011-6.
- U. Bilitewski, P. Rüger, R.D. Schmid, Glucose biosensors based on thick film technology, *Biosensors and Bioelectronics*, Volume 6, Issue 4, 1991, 369–373, ISSN 0956-5663, https://doi.org/10.1016/0956-5663(91)85024-Q.

Expiration

- 12 months at temperature 4 – 7°C

Transport

- Sensors are delivered in thermoboxes keeping low temperature when ambient temperature may exceed 40 degrees Celsius.

Ordering information

- The order reference: AC1.GOD
- Minimum order quantity – 20 sensors
- Orders in multiples of 20
- Delivery time for standard AC1.GOD sensors is 4 weeks from receipt of order
- Delivery time for non-standard AC1.GOD sensors depends on final technical specification of order

Examples of Order

- 100 pieces – AC1.GOD

Electrochemical measurement of glucose using sensors with immobilized glucose oxidase enzyme - Calibration curve