

DATASHEET

DATE OF ISSUE: 04182005

ELECTRODE, GLUCOSE



670522 BI

Use: This electrode cartridge is for *in vitro* use only. It is used for the quantitative determination of Glucose on Beckman Coulter CX and Benchtop chemistry analyzers.

Type: Polarographic oxygen electrode
Life Span: 20000 tests or 18 months from installation date**.

Storage: Store a room temperature in provided packaging.
Shelf Life: 5 year minimum shelf life.



PERFORMANCE CHARACTERISTICS (TYPICAL):

Span: >or=820 (new)*
Within-run SD: 0.1 mmol/L (serum/plasma/urine/csf)
Within-run CV: 2.0% (serum/plasma/urine/csf)
Total SD: 0.2 mmol/L (serum/plasma/urine/csf)
Total CV: 3.0% (serum/plasma/urine/csf)
Analytical Range: 0-450 mg/dL (Serum/plasma)
Notes: The above values are based on a Beckman CX analyzer w/mid range target(s).

INTERFERENCES:

Please refer to references listed below for a thorough discussion on interferences of polarographic oxygen electrodes.

CLEANING/MAINTENANCE

Follow OEM recommended procedure(s) in instrument operators manual. Procedure will vary depending on the specific analyzer model.

PRECAUTIONS:

This electrode has been tested for control recoveries using Beckman Decision, BioRad Lypochek serum/urine, Roche Precinorm/Precipath, N.I.S.T. SRM 909b and Hi Chem Align linearity standards/controls. PVI recommends that an independent correlation study be performed to confirm the appropriate operational parameters for your laboratory before utilizing this product in compliance with good laboratory practices.

Do not allow electrode to be exposed to extreme temperature changes which could stress the mechanical seal between the glass tip and rhodium wire.

THEORY:

Sample is injected into a glucose oxidase solution. A proportional amount of oxygen is released which permeates through a teflon membrane and changes the conductivity of the glucose gel. The polarographic electrode senses this change thru a rodium wire embedded in glass. The rate of change is directly proportional to the concentration of glucose in the sample.

REFERENCES:

Friedman, Clin. Chem. 1980, **26**, 4

Young, Clin. Chem. 1975, **21**, 5

Synchron CX chemistry information man. 1996, Glucose Interferences

* Span is dependent on gain set by electronics on the CX or by operator on the Benchtop models. It is also determined by operator charging techniques and cleanliness of the rhodium wire and silver anode.

** With proper maintenance this electrode can last indefinitely.