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DATASHEET

ELECTRODE, BUN

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472790 BI

Use: This electrode cartridge is for *in vitro* use only. It is used for the quantitative determination of Urea Nitrogen (BUN) on Beckman Coulter , LX chemistry analyzers.

Type: Conductivity (gold plate) 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):

INTERFERENCES:

CLEANING/MAINTENANCE

Span: >or=550 (new)
Within-run SD: 1.5 mg/DL (serum/plasma)
Within-run CV: 3.0% (serum/plasma)
Total SD: 2.3 mg/DL (serum/plasma)
Total CV: 4.5% (serum/plasma)
Analytical Range: 0-150 mg/dL (Serum/plasma)
Notes: The above values are based on a Beckman LX analyzer w/mid range target(s).

Please refer to references listed below for a thorough discussion on interferences of Bun conductivity electrodes.

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.

THEORY:

Sample is injected in a urease solution. The reaction converts urea (non ionic) to ionic ammonium carbonate. The rate of increase of solution conductivity is directly proportional to the concentration of urea present.

REFERENCES:

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

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

Synchron CX chemistry information man. 1996, Bun Interferences

** Life Span is dependent on proper maintenance and can definitely be shortened by improper maintenance. With very good maintenance habits conductivity electrodes can last more than 4 years. Improper removal of stirrer will scratch electrode surface and dramatically shorten the electrodes lifespan.