

DATASHEET

DATE OF ISSUE: 01102007

CARTRIDGE, REFERENCE ELECTRODE



373039 HI

Use: This electrode cartridge is for *in vitro* use only. It is used as a reference electrode for the quantitative determination of sodium, potassium, and chloride on Hitachi 900 series, and Modular Analytics chemistry analyzers.

Type: Silver/Silver chloride matrix
Life Span: 3 months from installation date*.

Storage: Store a room temperature in provided packaging.
Shelf Life: 2 years from manufacture date typical*. 15 C ^{30 C}

PERFORMANCE CHARACTERISTICS:

Slope: NA
Within-run SD: NA
Within-run CV: NA
Total SD: NA
Total CV: NA
Linearity: NA
Linear error: NA

INTERFERENCES:

NA

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. Our studies indicate that you can expect a consistent adherence to literature values established for the OEM electrode. See note 1 for further information. **THIS PRODUCT SHOULD NOT BE USED AS A CHLORIDE ELECTRODE!** **CAUTION:** OEM recommended procedures require that all electrodes including this electrode be removed and replaced with a dummy cartridge(s) prior to running any bleach through the ISE flowpath. Exposure of this electrode directly to bleach will definitely degrade/interfere with its performance and void the warranty.

THEORY:

A solid state sensor (silver/silver chloride matrix) detects chloride activity in aqueous potassium chloride. The resulting potential is used as the anode potential in potentiometric measurements of sodium, potassium, and chloride.

REFERENCES:

Friedman, Clin. Chem. 1980, **26**, 4
Young, Clin. Chem. 1975, **21**, 5

Note 1 - A comparison of Hitachi and Perphormax Brand Ion-selective Electrode Response; D. Nagahara, D. Otten; *Internal White Paper*, October, 2004; Peripheral Visions, Inc. A copy of this study can be found on our website at www.peripheralvisions.com.

* Warranty expires when use period condition is reached or expiration date is past. Warranty on tests and use periods expire at 6 months from shipment if not already consumed.