## **DiaSys Electrolytes The Photometric Alternative**

# Sodium Potassium Chloride

Precise. Accurate. Reliable. Liquid Stable. Ready To Use. The Economic Alternative.



CHOOSING QUALITY.

## **DiaSys Electrolytes** The Photometric Alternative

Ion-selective electrodes (ISE) are most common for measuring electrolytes. The drawback of this method is the high price for labs with a small to mid-size amount of electrolyte requests. Due to regular maintenance costs for constant rinsing and renewal of the expensive electrodes regardless of the number of tests performed, we have developed photometric tests for electrolytes as the economic alternative.

#### When do DiaSys electrolyte tests make sense?

- You are unhappy with the high costs and the time involved for ISE-based diagnosis
- You use a separate ISE unit for the measurement of electrolytes
- You own a clinical chemistry analyzer without ISE unit
- You need a backup for your ISE
- You are looking for reliable high quality photometric electrolyte tests



# Your advantages with DiaSys photometric tests for electrolytes

- No additional maintenance costs
- Consolidation on one clinical chemistry analyzer (no separate ISE unit)
- No sample splitting
- One report per patient
- Reduced workload for lab staff
- Reduced risk of data transfer errors
- Improved traceability of patient results

Even if only one of above mentioned arguments is applying to your laboratory, the photometric electrolyte tests from DiaSys provide significant effects on cost reduction and overall quality of your test results.

### One calibrator for all: TruCal E

- Calibrator for sodium, potassium and chloride
- Liquid-stable, ready-to use
- No dilution steps
- Contains serum  $\rightarrow$  reacts similar to patient samples
- 3 months stability after opening

Precision							
	In series			From day to day			
Sodium							
Mean [mmol/L]	130	144	150	130	143	149	
CV [%]	0.95	0.69	0.59	1.40	1.42	1.67	
Potassium							
Mean [mmol/L]	4.40	4.83	7.05	3.26	4.33	7.06	
CV [%]	1.03	1.08	1.17	1.99	3.73	2.20	
Chloride							
Mean [mmol/L]	87.3	100	116	88.3	102	116	
CV [%]	0.96	0.55	1.37	1.77	1.61	1.59	

#### Performance (on respons®)

	Sodium FS	Potassium FS	Chloride 21 FS
Method	Enzymatic method using Na <sup>+</sup> dependent ß-galactosidase	Enzymatic method using K <sup>+</sup> dependent pyruvate kinase	Innovative colorimetric method
Measuring range	100 – 180 mmol/L	2 – 8 mmol/L	40 – 170 mmol/L
Sample type	Serum, heparin plasma	Serum, heparin plasma	Serum, heparin plasma
On-Board stability	4 weeks	4 weeks	7 weeks
Calibration stability	1 day	7 days	7 days
Interference limits No interferences up to	±3% Ascorbate 50 mg/dL Conjugated bilirubin 15 mg/dL Unconjugated bilirubin 60 mg/dL Lipemia 1000 mg/dL triglycerides Hemoglobin 200 mg/dL (no inter- ference ±5% by hemoglobin up to 600 mg/dL) No interferences by other ions in clinical relevant range	±4.5% Ascorbate 60 mg/dL Conjugated bilirubin 40 mg/dL Unconjugated bilirubin 60 mg/dL Lipemia 1000 mg/dL triglycerides Hemoglobin 500 mg/dL No interferences by other ions in clinical relevant range	±4.5% Ascorbate 30 mg/dL Conjugated bilirubin 30 mg/dL Unconjugated bilirubin 42 mg/dL Lipemia 500 mg/dL triglycerides Hemoglobin 500 mg/dL No interferences by other ions in clinical relevant range
Traceability	NIST SRM 956	NIST SRM 956	NIST SRM 956

### **Features and Benefits**

- Liquid-stable, ready-to-use reagents
- High performance
- Accurate results over a wide linear range
- Results well comparable to ISE

- Excellent on-board and calibration stability
- Superior precision
- Minimized interferences
- Traceable to international reference material

#### Leading Technology in Fluid-Stable Reagents from DiaSys

- Global player in clinical chemistry tests with recognized R & D department
- Quality products made in Germany
- High quality raw materials from traceable origin
- Processes and resources certified according to ISO 13485, ISO 9001 and full-filling highest internal quality standards
- Sustainable processes and products preserve the environment
- High performance ready-to-use reagents with minimized interferences, long shelf life, on-board stability and traceability to international references
- Perfectly matched fluid-stable reagents, calibrators and controls
- Premium service supply in technics, applications and after sales

#### CHOOSING QUALITY.

DiaSys offers reagent kits for photometric electrolyte testing for respons<sup>®</sup> analyzers and kits for multi-purpose and manual use. The appropriate calibrator is suitable for all three electrolyte tests, liquid-stable and behaves similar to patient samples. Detailed information about the tests is available on our website www.diasys-diagnostics.com/products/ reagents and in our product catalogue.



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