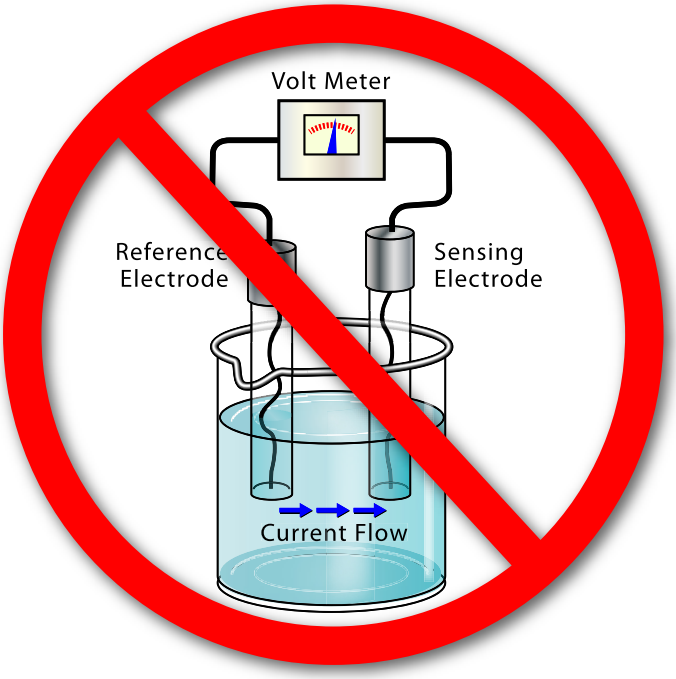
DIAZYME

TURN ON YOUR LYTES

Without the Electricity



Introducing an alternative to high priced ISE's

- **Enzymatic Electrolytes**
  - ***Sodium***
  - ***Lithium***
  - ***Potassium***
  - ***Bicarbonate***

- **Low cost per test**
- **Extensive range of instrument parameters**
- **Packaging options for labs of all sizes**

Outstanding accuracy and precision without the replacement and maintenance costs of ISE Electrodes

DIAZYME ENZYMATIC ELECTROLYTES

The hassle free alternative to ISE's

	Sodium	Potassium	Lithium	CO_2
Method	Enzymatic - A sodium-dependent β-galactosidase cleaves ONPG substrate. The product O-nitrophenyl is read at at 405 nm and is proportional to the sodium concentration.	Enzymatic – A potassium dependent pyruvate kinase catalyzes the conversion of NADH analog to NAD analog which is measured at 380 nm and is proportional to the potassium concentration	Enzymatic - a lithium sensitive phosphatase catalyzes the conversion of adenosine biphosphate (PAP) to hypoxanthine and hydrogen peroxide which is then quantified by a Trinder reaction	The assay is based on a coupled reagent with phosphoenolpyruvate carboxylase (PEPC) and malate dehydrogenase (MDH). The decrease in absorbance at 405 or 415 nm is directly proportional to CO_2 concentration in the sample.
Traceability	Sodium calibrator and control are traceable to NIST standard and an ISE method	Potassium calibrator and control are traceable to NIST standard and an ISE method	Lithium calibrator and control are traceable to NIST standard and an ISE method	CO_2 calibrator and control are traceable to NIST standard and an ISE method
Method Correlation to Predicate	R^2 = 0.98 regression y = 1.020x - 2.17	R^2 = 0.98 regression y = 1.07x - 0.30	R^2 = 0.99 regression y = 1.03x - 0.04	R^2 = 0.99 regression y = 1.0447x - 0.9742
Precision	**The within-run CVs** 1.2% at 137 mmol/L 1.1% at 160 mmol/L. **The total CVs** 1.56% at 137 mmol/L 1.65% at 160 mmol/L	**The within-run CVs** 1.12% at 4.46 mmol/L 1.20 % at 6.86 mmol/L. **The total CVs** 1.77% at 4.46 mmol/L 1.77% at 6.86 mmol/L	**The within-run CVs** 4.3% at 1.0 mmol/L 1.2% at 2.5 mmol/L **The total CVs** 4.8% at 1.0 mmol/L 1.3% at 2.5 mmol/L	**The within-run CVs** 2.3% at 25 mmol/L 2.3% at 40 mmol/L **The total CVs** 2.8% at 25 mmol/L 3.3% at 40 mmol/L
On Board Stability	4 weeks	2 weeks	4 weeks	4 weeks
Calibration Interval	1 week	2 weeks	2 weeks	4 weeks
Calibrator	Liquid stable calibrator set, no serial dilutions are required	Liquid stable calibrator set, no serial dilutions are required	Liquid stable calibrator set, no serial dilutions are required	Liquid stable calibrator set, no serial dilutions are required
Sample Type	Serum	Serum	Serum	Serum, Heparinized Plasma
Sample Volume	8 uL	5 uL	5 uL	3 uL
Assay Range	linear range of 80 - 180 mmol/L	linear range of 2 - 8 mmol/L	0.19 - 3.0 mmol/L	1.12 - 50 mmol/L
Instrument Specific Packaging	Universal kit packaging 360 Test Kit with calibrator 720 Test Kit with calibrator	Universal kit packaging 360 Test Kit with calibrator 720 Test Kit with calibrator	Universal kit packaging 100 and 200 Test Kit Beckman Synchron Beckman AU Roche Hitachi	Universal kit packaging 300 Test Kit Beckman Synchron Beckman AU

DIAZYME

DIAZYME LABORATORIES

12889 Gregg Court, Poway, CA 92064 PO Box 85608, San Diego, CA 92186

Tel: 858-455-4768 888-DIAZYME WWW.DIAZYME.COM SALES@DIAZYME.COM