



- Peaks:**
- 1. Chloride
 - 2. Nitrate,
 - 3. Sulfate
 - 4. Tartaric
 - 5. Malic
 - 6. Citric
 - 7. Succinic
 - 8. Acetic
 - 9. Lactic
 - 10. Phosphate
 - 11. Propionic
 - 12. Butyric
 - 13. Pentanoic
 - 14. Hexanoic
 - 15. Octanoic

Method Conditions

- Voltage:** 30kV
- Capillary:** MicroSolvCE™ Bare Fused Silica, 75µm x 60cm (50cm to detector)
- Injection:** 5 sec pressure
- Run Buffer:** CElixirOA™ pH 5.4 Accelerator
- Detection:** Indirect UV 230nm
- Polarity:** Reverse

Pharmaceutical Counter-ions

Easy • Fast • Reliable

Method

Buffers from a CElixirOA™ pH 5.4 Kit for anion analysis, a Beckman P/ACE MDQ™ CE Instrument and a 75µm ID bare fused silica capillary were used for the analysis and separation of over 10 anions and organic acids. The sample was hydro-dynamically injected for 5 seconds and the capillary conditioned as per the CElixirOA™ manual. The separation was easily achieved in a run time of less than 7 minutes. Please note: in reverse polarity the sample is introduced at the cathode and will migrate to the anode. (Organic Acid is used as an internal standard.)

Discussion and Rationale

Pharmaceutical compounds are often charged and have counter-ions. These counter-ions are an important part of the formula weight and may have a significant impact on the effective concentration of the API (active pharmaceutical ingredient) in the drug's formulation. As regulatory agencies (such as the FDA) require full testing of the composition of all pharmaceutical ingredients it is important to determine the presence of these analytes. CElixirOA™ is an easy to use pre-made dynamic coating/buffer system that separates and detects these negatively charged counter-ions (organic acids or inorganic ions) that do not absorb UV light. It is fast, economical, reliable and runs in reverse polarity

For more information visit www.microsolvtech.com
Webcode: OA-CAT

Cat. No.	Description
06100-5.4	CElixirOA™ Kit pH 5.4, complete with Initiator and Accelerator Buffer Solutions Pyridine-dicarboxylic acid, indirect UV Detection.

