



VILLA LABECO s.r.o.
Chrapčiakova 1
052 01 Spišská Nová Ves

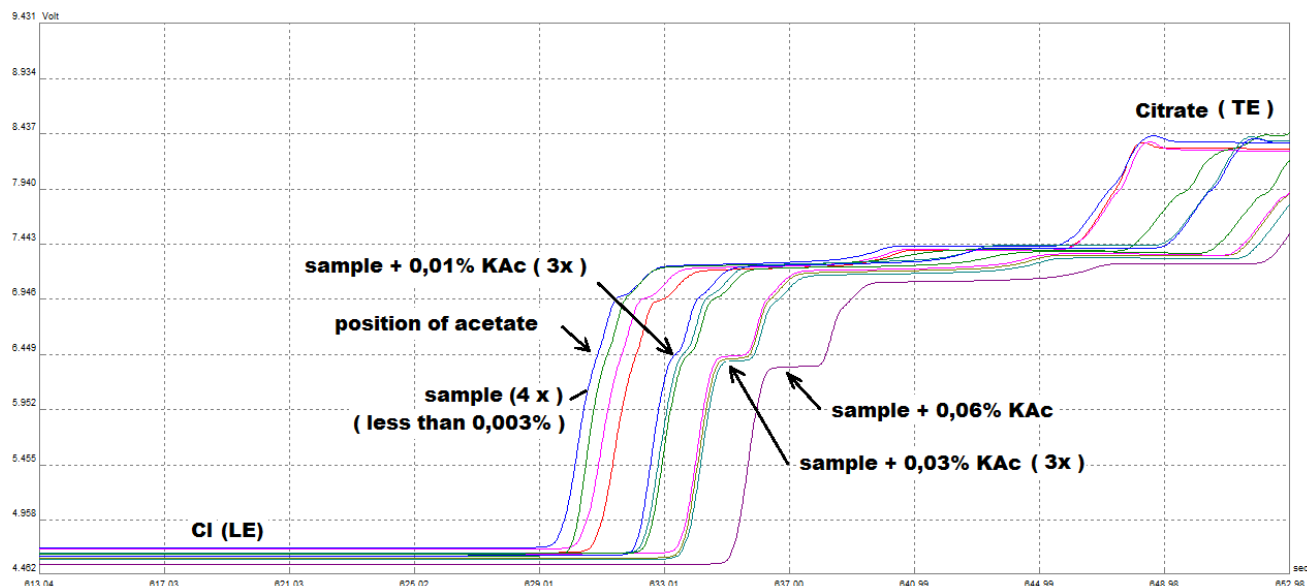
ISOTACHOPHORESIS

APPLICATION NOTE No. 34

SIMPLE and FAST ANALYSIS of PURITY of PENICILINE

MAIN FEATURES:

In the final stage of production of peniciline very high concentrated solution of potassium acetate (KAc) is used. So the content of this impurity is necessary to check in the final product. Isotachophoresis offers very simple and fast method for such analysis. Content of acetate (or KAc) is possible to check on very low level (LOD 0,003%) that is much lower than is required. No sample pretreatment is necessary, only to dissolve the sample and inject into the analyser. Time of analysis is ca 10 min.



Obr.. 1: Record of analysis of peniciline with added impurity to final product.

Conditions: Leading electrolyte (LE): 6 mM HCl + 2 mM MgCl₂ + histidine + 0,1MHEC
Terminating electrolyte (TE) : 5 mM citric acid +5 mM histidine
V =30 uL, I = 300 uA / 50 uA.

CZE and ITP instruments are produced by:

Villa Labeco s.r.o., Chrapčiakova 1, 052 01 Spišská Nová Ves, Slovakia
www.villalabeco.sk