



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

ISOTACHOPHORESIS

APPLICATION NOTE No. 14

DETERMINATION of GLUTAMATE in FOOD

MAIN FEATURES:

Today the glutamate is the most widely used food additive for taste intensification, mainly in soups and sauces. Only extraction of the sample with water and simple filtration are needed in a pre-treatment step. High speed and precision and no interferences are typical features of this determination.

ITP allows the simultaneous determination of other anion substances such as 5-monophosphate, citrate, inosine 5-monophosphate, etc.

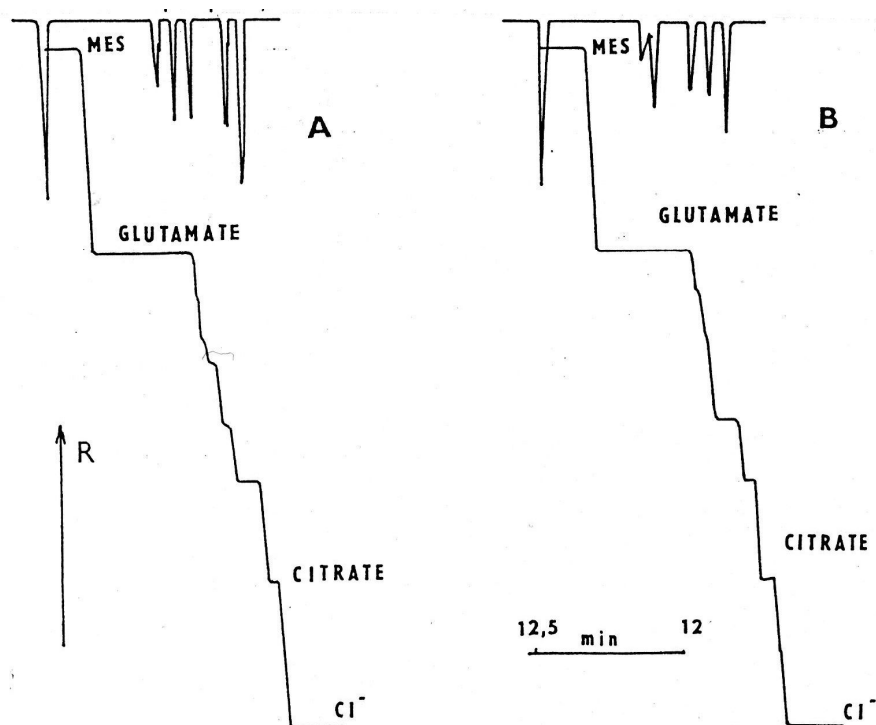


Fig. 1 : Isotachophoreograms of glutamate determination in soup (A) and sauce (B).

Conditions :

leading electrolyte (LE):
 10^{-2} M Cl + $2 \cdot 10^{-2}$ M histidine + 0,1MHEC , pH=6,0

terminating electrolyte (TE): $5 \cdot 10^{-3}$ morpholineethanesulfonic acid

V=30 μ l

CZE and ITP analysers are produced by :

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