

Abstract

Determination of Lactulose by capillary zone electrophoresis

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A lot of sugar analysis methods exist. Capillary Electrophoresis (CE), High Performance Liquid Chromatography (HPLC), Gas Chromatography (GC), Thin-Layer Chromatography (TLC) etc. HPLC is the method which is most used, however other methods have also some advantage.

One of the already described capillary electrophoresis methods is the carbohydrate separation in alkaline medium after chelation with copper(II) ions with direct UV detection without need of previous derivatization. It has been tested for simple sugars, disaccharides, some amine-acids and inorganic cations.

I applied capillary electrophoresis method mentioned above on questions of setting up osmotic laxantium lactulose. Lactulose is disaccharide from the chemistry point of view. It appears in molasses form in commercial medicaments. The method has been suited to the apparatus used during the research and tested substance. It has been proved the specificity and accuracy of the method and it has been set up correlation factor (0,9994). Quality and quantity analysis has been applied on chosen samples.