

Study of Methanol Levels in Some Alcoholic Beverages of Albania Market

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Abstract: The objective of this study was evaluation of the levels of methanol in alcoholic beverages using capillary gas chromatography technique. In this study were taken 36 samples of various alcoholic beverages of Albania markets (October 2011), selected as representative types, by their production and origin. Grape Rakia samples that were the main group was classified into two subgroups: “home” produced grape Rakia and grape Rakia produced in industrial way. Other types of Rakia (apple, plumb, *ect.*) were seen separately. Rakia is one of the most popular and traditional products in Albania. Other alcoholic drinks (vodka, ouzo, brandy, etc.) were grouped together. Alcoholic beverages are defined as drinks, whose main ingredient (except water) is ethyl alcohol. Other components of alcoholic beverages are other alcohols, acids, aldehydes, esters, etc. Particular interest had the determination of methanol in alcoholic beverages. Presence of methanol in alcoholic beverages over the allowed limit, indicating high risk and can lead to death. Gas chromatographic analyses were performed with a Varian 450 instrument equipped with a flame ionization detector and PTV detector. VF-1ms capillary column (30 m x 0.25mm x 0.25um) was used for isolation and determination of alcohol mixture. Analyzed compound for this study were: Methanol, Ethanol, Propanol, iso-Butanol, Propenol, s-Butanol, n-Butanol, 3-Methyl Butanol and n-Pentanol. Methanol levels were lower than allowed limit for all studied samples.

Keywords: *Methanol, capillary gas chromatography, alcoholic beverages*

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