

DETERMINATION OF MENTHOL IN CANDY "TRAVISIL"

Menthol - cyclic terpene alcohol, which is produced synthetically or extracted from mint essential oils. Due to its anesthetic, antiseptic properties, very low toxicity (LD50 lethal dose at equal intake of 350 mg / kg and in contact with skin 3300 mg / kg), it is widely used in pharmaceutical preparations as a flavoring in food industry, in the production of cosmetics. Today in Ukraine drugs undergo significant fraud. Specified on the packaging of pharmaceutical composition is not true. As a result, their use sometimes results in the desired effect. Therefore, control of the content of the components of drugs is an important task, both for producers and for consumers. For example, there is no uniform methods of sample preparation in the quantitative determination of menthol, but wrong contents of components often associated with errors that occur at this stage of analysis. The liquid-liquid extraction today remains the most affordable and the most common method of sample preparation in the analysis of menthol for most laboratories

The purpose of the work was to develop a technique of liquid-liquid extraction of menthol candies "Travisyl" and its subsequent chromatographic determination.

Conditions of the liquid-liquid extraction and gaschromatography analysis of the menthol in the candies "Travisyl" were optimized. Was found that menthol from aqueous solutions is best removed with hexane. Chromatographic separation occurs in isothermal mode on the HP- 5 column. Menthol content was calculated by the method of internal standard. On the whole operating range of concentrations relative standard deviation does not exceed 0.04, which correlates with the literature data. Chromatographic analysis time is 6 minutes. Samples of candies "Travisyl" was analyzed in this conditions. Found menthol content in candies "Travisyl" than the data specified on the package (2 mg).

Key words: liquid-liquid extraction, menthol, gaschromatography analysis.