

## Determination of Phthalates in Pharmaceutical Products

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*A gas chromatographic method with flame ionization detector was applied to the determination of phthalates in pharmaceutical products prepared in aqueous media, using preconcentration via dispersive microextraction. According to the analysis of pharmaceuticals, the following values of phthalates content were obtained: dibutyl phthalate 76–1200 ng/ml, diisobutyl phthalate 60–540 ng/ml and diethylhexyl phthalate 58–240 ng/ml. A significant effect of other components on the extraction recovery of phthalates has been shown. The values of matrix effect were calculated and regularity has been established: increase of matrix effect led to decrease in extraction recovery of phthalates.*

*Standard additions method was used to reduce the impact of matrix effect on the determination of phthalates. The data obtained are characterized by relevant accuracy and reproducibility, and the relative standard deviation does not exceed 12.6%.*

**Keywords:** phthalates, gas chromatography, preconcentration, dispersive liquid – phase microextraction, pharmaceutical analysis

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