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SEPARATION OF AROMATIC INTERMEDIATES OF BIOLOGICAL INTEREST USING EMULSION LIQUID MEMBRANES

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Abstract

Established applications of emulsion liquid membranes (ELM) refer to refining in hydrocarbons and hydrometallurgical processing, rehabilitation of poisoned patients. In this work we investigated the separation of aromatic compounds of biological interest, more often encountered as intermediates in dyes and drugs industry: aniline, nitrobenzene, ortho and para-toluidine, using emulsion liquid membranes. The experimental results showed that in the case of basic substances separation the main physicochemical characteristics which have to be considered are alkalinity and water solubility. Thus, for the liquid emulsion membranes operation it is preferred to have a basicity as high as possible and a solubility as low as possible.

Key words: aromatic intermediates, biological interest compounds, liquid membranes, separation

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