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## PROBLEMS OF DE-PHENOLIZATION AND IMPROVEMENT OF THE QUALITY OF THE ABSORBING FRACTION (REVIEW)

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*It is shown that improving the quality of absorbent oil is now becoming an important economic task due to the need to purchase an imported absorbent of benzene hydrocarbons from coke oven gas. The need for economical consumption of fresh oil to replenish the circulation cycle determines the main requirement for the quality of the fresh absorbent. The state of the equipment and the capabilities of the technological regime of benzene departments (increased absorption temperature, insufficient heating before distillation, watering of the absorber as a result of frequent shutdowns, etc.) make it necessary to look for an oil that would provide low specific consumption in this situation. The issue of de-phenolization of the wash oil fraction remains controversial, and arguments for and against de-phenolization are presented.*

*It is shown that the de-phenolization stage with the existing sodium phenolate processing cycle cannot function in the current conditions. Stricter requirements for the management of intermediates and waste make it necessary to switch to an alternative method. The rejection of alkaline extraction of phenolics has led to the development of new separation methods for purification of coal tar distillation fractions. In particular, the wash oil fraction is still the subject of research in order to extract various individual products and groups of substances from it with new types of extractants. Data on recent studies of phenol extraction from coal fractions using completely new materials are presented. It is concluded that there are currently no new proposals ready for industrial implementation. For the functioning of fractional de-phenolization at Ukrainian enterprises, it is necessary to develop a new method with an acceptable level of processing, and extraction de-phenolization seems to be the most promising.*

Keywords: coal tar fractions, phenols, specific consumption, de-phenolization, extraction, ionic liquids..

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