SYNTHESIS OF CRESSOLS OF TRANSMETHYLLATION OF PHENOL WITH METHYLBENZENES

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Transmethylation of phenol by methylbenzenes is slightly studied method of preparation of synthetic creosols.

In this report the prepared results of the reaction of transmethylation of phenol with methyl homologs of benzene in the presence of the synthesized bizeolite catalysts.

The influence of structure of transmethylated agent (toluene, o-, m-, p-xylenes, pseudocumene, mesytilene, technical xylene fraction), temperature, pressure, hydrodynamic situation of the reactor and stoichiometrical component [hydrogen, nitrogen, carbon oxide (IV)] on influence and isomer composition of the prepared methylphenols has been studied.

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\begin{align*}
\text{HO-} & \begin{array}{c} R_1 \end{array} + \begin{array}{c} R_2 \end{array} \text{CH}_3 \rightarrow \text{HO-} \begin{array}{c} R_1 \end{array} + \begin{array}{c} R_2 \end{array} \text{CH}_3 \\
R_1, R_2 &= \text{H,CH}_3 
\end{align*}
\]

The results having practical value were prepared in transmethylation of phenol with o- and p-xylenes and pseudocumene. It has been established that transmethylation proceeds at the expensive formation of surface complexes of diphenylalkane structures which are intermediate products in preparation of methylphenols.