

OLIGOMERS OF PHENOLIC TYPE RESIN, DERIVED FROM THE CONDENSATION OF PHENOL WITH BENZYL CHLORIDE

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ABSTRACT

It is well established that compounds of high phenol coefficients such as *o*- and *p*-benzylphenols find applications as additives in disinfectants¹ and are therefore of industrial interest. They are generally prepared by reacting benzyl chloride and phenol in the presence of a Friedel-Crafts catalyst. However, the condensation of phenol with benzyl chloride at elevated temperatures of 180 -200 °C occurs without a catalyst and instead of the anticipated *o*- and/or *p*-benzylphenols, a light brown oil is obtained², which on analyses has revealed a mixture of oligomers of the phenolic resin type. The isolation and characterization of the different oligomeric components shall be presented and discussed.

References:

1. McMaster, L., Bruner, W. M. Benzylation of phenol. Ind. & Eng. Chem., 505, 1936.
2. Kalle and Company, German Patent 346,384 December 1921.