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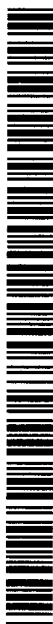
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(54) Title: PROCESS FOR PREPARING CUMENE WHICH IS USED IN THE PREPARATION OF PHENOL

(57) Abstract: The invention relates to a process for the preparation of cumene by reacting isopropanol or a mixture of isopropanol and propene with benzene in presence of a β -zeolite catalyst having a $\text{SiO}_2/\text{Al}_2\text{O}_3$ molar ratio greater than 10:1 that can be integrated in a process for preparing phenol, which comprises the steps I. preparation of cumene as described above, II. oxidation of cumene to cumene hydroperoxide, III. acid-catalyzed cleavage of cumene hydroperoxide to give phenol and acetone and IV. hydrogenation of acetone to form isopropanol. In the reaction of isopropanol with benzene, propene is formed by dehydration of isopropanol simultaneously with the alkylation of benzene to cumene by means of isopropanol and the propene formed is likewise used for the alkylation of benzene to cumene. Formation of n-propylbenzene in this process step according to the invention is barely observed or is in the range below 150 wppm. The β -zeolite catalyst having a $\text{SiO}_2/\text{Al}_2\text{O}_3$ molar ratio greater than 10:1 exhibits an increased activity in the alkylation of benzene and leads to a higher selectivity in the alkylation, so that the yield in the overall process for preparing phenol can be improved compared to conventional processes.