

Abstract

METHOD FOR PRODUCING ISOPROPYL BENZENE FROM BENZENE AND PROPYLENE

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The present invention relates to a method for producing isopropyl benzene comprising the following steps. Step A: feeding a first stream containing benzene and a first stream containing propylene into a first reaction zone to contact a first catalyst for alkylation, and obtaining a first
10 stream containing isopropyl benzene from the first reaction zone, dividing the first stream containing isopropyl benzene into a stream Ia and a stream IIa, the stream Ia circulating back into the first reaction zone and the stream IIa entering into a second reaction zone, having the stream entering the second reaction zone to contact a second catalyst for alkylation, and obtaining a second stream containing isopropyl benzene from the second reaction zone, and
15 purifying at least a partial stream IIIa of the second stream containing isopropyl benzene, and obtaining a product isopropyl benzene. According to the method of the present invention, high propylene conversion rate, long operating life of catalyst, and low n-propyl benzene can be realized under even lower benzene to propylene ratio. The method of the present invention achieved better comprehensive results, thus having better economic and social benefits, as well
20 as broader application prospect.

Fig.1