

A PROCESS FOR PRODUCING POLYCARBONATE

ABSTRACT OF THE DISCLOSURE

An improvement to the melt transesterification reaction of diaryl carbonate with dihydroxy aryl compound is disclosed. The improvement entails the following steps (i) introducing the resulting vapor stream at the mid-height of a first distillation column, and (ii) separating the vapor stream into a top product containing high purity monohydroxy aryl compound and a first bottom product, and (iii) recycling the high purity monohydroxy aryl compound of (ii) to the reaction, and (iv) introducing the first bottom product at mid-height of a second distillation column, and (v) separating said first bottom product into high boiling bottom by-product and overhead remaining constituents, and (vi) introducing the overhead remaining constituents at mid-height of a third distillation column, and (vii) separating said overhead remaining constituents into overhead low-boiling fractions and bottom or product side stream that contains diaryl carbonate product, and (viii) recycling the diaryl carbonate product directly to the transesterification reaction.