

ABSTRACT OF THE DISCLOSURE

Phase Boundary Processes for Preparing Polycarbonates

Continuous processes for preparing polycarbonates having a weight average molecular weight M_w of 15,000 to 200,000 g/mol, the processes comprising reacting a dihydroxydiarylalkane and phosgene in the presence of a catalyst in a phase boundary process comprising: continuously dispersing in a disperser an organic phase comprising at least a portion of the phosgene and a solvent suitable for the polycarbonate and an aqueous phase comprising the dihydroxydiarylalkane, water and an alkali solution present in an amount of 1.5 to 2.5 moles per mole of the dihydroxydiarylalkane, to form a mixture; reacting the mixture in a first reactor with a residence time of less than 0.5 seconds; further reacting the mixture in a second reactor with addition of further alkali solution and, optionally, a chain terminator; and effecting further condensation in a third reactor with addition of further alkali solution and, optionally, a chain terminator, in the presence of the catalyst.