A POLYOL BLOCK COPOLYMER, COMPOSITIONS AND PROCESSES THEREFOR

ABSTRACT

A process for producing a polyol block copolymer in a multiple reactor system is described comprising a first and second reactor wherein a first reaction takes place in the first reactor and a second reaction takes place in the second reactor. The first reaction is the reaction of a carbonate catalyst with CO2 and epoxide, in the presence of starter and/or solvent to produce polycarbonate polyol copolymer and the second reaction is the reaction of DMC catalyst with the polycarbonate polyol compound of the first reaction and epoxide to produce polyol block copolymer. The product of the first reaction is fed into the second as crude reaction mixture, the epoxide and the polycarbonate polyol compound of the first reaction are fed in a continuous or semi- batch manner, and/orthe product of the first reaction has neutral or alkaline pH on addition to the second.The invention further relates to the copolymers and products incorporating such copolymers.
(No Suitable Fig.)