

PROCESS FOR PREPARING ALKANEDIOL AND DIALKYL CARBONATE

ABSTRACT

The invention relates to a process for the preparation of a dialkyl carbonate and an alkanediol comprising: (a) reacting an alkylene carbonate and an alkanol in the presence of a homogeneous transesterification catalyst to obtain a mixture containing unconverted alkylene carbonate, unconverted alkanol, dialkyl carbonate, alkanediol and catalyst, wherein the catalyst amount is of from 20 to 2,000 ppmw based on the amount of the mixture; (b) contacting the mixture from step (a) with a solid sorbent to obtain a mixture containing unconverted alkylene carbonate, unconverted alkanol, dialkyl carbonate and alkanediol and further containing either no catalyst or a substantially reduced amount of catalyst; (c) separating the mixture from step (b) into a bottom stream containing unconverted alkylene carbonate and alkanediol and a top stream containing unconverted alkanol and dialkyl carbonate; (d) recovering the alkanediol from the bottom stream from step (c); and (e) recovering the dialkyl carbonate from the top stream from step (c).