

ABSTRACT

A method for continuously producing a dialkyl carbonate and a diol, comprising: (1) continuously feeding a cyclic carbonate and an aliphatic monohydric alcohol to a continuous multi-stage distillation column, and continuously effecting a transesterification between the cyclic carbonate and the aliphatic monohydric alcohol in the presence of a transesterification catalyst in the distillation column, while continuously withdrawing a low boiling point mixture in a gaseous form containing the produced dialkyl carbonate and the unreacted aliphatic monohydric alcohol from an upper portion of the distillation column and continuously withdrawing a high boiling point mixture in a liquid form containing the produced diol and the unreacted cyclic carbonate from a lower portion of the distillation column, and (2) continuously feeding the high boiling point mixture withdrawn from the lower portion of the distillation column to a continuous etherification reactor, to thereby effect a continuous etherification reaction between the unreacted cyclic carbonate and a part of the produced diol and produce a chain ether and carbon dioxide, while continuously withdrawing the resultant etherification reaction mixture containing the remainder of the diol produced in step (1) and the produced chain ether from the continuous etherification reactor, wherein the etherification reaction mixture has a cyclic carbonate content of from 0 to 10^{-2} in terms of the weight ratio of the cyclic carbonate to the diol.