

ABSTRACT

A method for continuously producing a (A) dialkyl carbonate and a (B) diol, comprising continuously feeding a cyclic carbonate and an aliphatic monohydric alcohol to a continuous multi-stage distillation column to thereby effect a transesterification therebetween, thereby continuously producing a dialkyl carbonate and a diol, while continuously withdrawing a low boiling point mixture containing the produced dialkyl carbonate (A) in a gaseous form from an upper portion of the distillation column and continuously withdrawing a high boiling point mixture containing the produced diol (B) in a liquid form from a lower portion of the distillation column, wherein the transesterification is performed under conditions wherein: (a) the reaction pressure of the column bottom is 5×10^4 Pa or less; (b) the reaction temperature of the column bottom is in the range of from -20°C to less than 60°C ; and (c) the distillation column has an F-factor in the range of from 0.2 to 5.0, the F-factor being represented by the following formula (1):

$$\text{F-factor} = u_g (\rho_g)^{1/2} \quad (1)$$

wherein u_g represents the gas velocity (m/s) in the distillation column and ρ_g represents the gas density (kg/m^3) in the distillation column.