

ABSTRACT

It cannot be said that the reaction rate of a carbonate ester production reaction based on carbon dioxide and a monohydric alcohol has been sufficiently improved by conventional catalysts, and higher reaction efficiency is required. In addition, conventional catalyst-supporting structures used in carbonate ester production reactions cannot be said to have always had sufficiently strong structures. The above problems have been solved by a method for producing a carbonate ester. Specifically, the method for producing a carbonate ester comprises a step for making a monohydric alcohol and carbon dioxide react in the presence of a catalyst structure to produce a carbonate ester, wherein the catalyst structure includes a substrate and a catalyst layer formed on at least a portion of the surface of the substrate and containing at least a solid catalyst and a binder, the solid catalyst contains particulate cerium oxide, and the binder contains cerium oxide as a uniform component.