

ABSTRACT

An object of the invention is to provide a methanol production process which can efficiently produce methanol from carbon dioxide and hydrogen while suppressing loads to the global environment. The process for producing methanol of the invention includes a step (a) of reacting hydrogen and carbon dioxide with each other in a reactor in the presence of a copper-containing catalyst to produce a reaction mixture containing methanol; a step (b) of circulating part or all of the reaction mixture to the step (a); a step (c1) of combusting part of the reaction mixture to produce a combustion product and energy, and a step (c2) of circulating part or all of the combustion product to the step (a), the step (c1) and the step (c2) being performed when the reaction mixture contains a compound (p) containing carbon and hydrogen except methanol at not less than 0.1 mol% (wherein all components of the reaction mixture excluding methanol and water represent 100 mol%); and a step (d) of separating a component including methanol from the reaction mixture.