

TITLE: METHOD FOR PRODUCING CATALYST COMPACT FOR USE IN
PRODUCING UNSATURATED CARBOXYLIC ACID, AND METHOD FOR
PRODUCING UNSATURATED CARBOXYLIC ACID AND UNSATURATED
CARBOXYLIC ESTER USING SAME

ABSTRACT

An object is to provide a method for producing a catalyst molded article which is high in mechanical strength and which enables unsaturated aldehyde and/or unsaturated carboxylic acid to be produced at high yield(s). The object is achieved by a method for producing a catalyst molded article, the method including (1) a step of adding an ammonium radical to a slurry (liquid A) including molybdenum and phosphorus, at a rate satisfying the following expression (I), to prepare a slurry (liquid B), $0.1 \leq v/M \leq 3$ (I), in which v represents the rate of addition of the ammonium radical [mol/hour], and M represents the mass of the liquid A [kg], (2) a step of adjusting the pH of the liquid B, to prepare a slurry (liquid C) having a pH lower than that of the liquid B by 0.2 or more and having a pH of 4 or less, (3) a step of drying the liquid C, to obtain a catalyst powder, (4) a step of mixing the catalyst powder and a liquid, to produce a catalyst powder mixture, and (5) a step of molding the catalyst powder mixture,

to produce a catalyst molded article, in which the penetration rate coefficient of the liquid to the catalyst powder in step (4) is $0.07 \text{ g}^2/\text{s}$ or more.

(No figure).