

ABSTRACT

PROCESS FOR PRODUCING LOWER-HYDROCARBON AROMATIZATION CATALYST AND LOWER-HYDROCARBON AROMATIZATION CATALYST

[Abstract]

[Task] To improve activity of a lower hydrocarbon aromatization catalyst and the catalyst stability.

[Solving Means] In a method for producing a lower hydrocarbon aromatization catalyst to produce an aromatic compound by a catalytic reaction using a lower hydrocarbon as a raw material, the catalyst includes a metallocsilicate on which molybdenum is supported, a silane in 0.75 weight % or more relative to the metallocsilicate component is supported, and the catalyst is prepared by conducting a compressive shaping without adding an inorganic binder that binds particles of the catalyst. As a result, the lower hydrocarbon aromatization catalyst maintains a sufficient shape-retaining property even by a compressive shaping in a binderless manner. Stability of the catalyst and activity of the catalyst improve by subjecting the lower hydrocarbon aromatization catalyst to a compressive shaping in a binderless manner. Its advantageous effect is conspicuous when the amount of addition in terms of silicon oxide is 0.75 weight %.

[Selected Drawing] Figure 1