

Abstract

The present invention provides a process for preparing a catalytic cracking catalyst, which is characterized in that the process comprises: mixing raw materials including a rare earth-containing NaY molecular sieve obtained by contacting a NaY molecular sieve with a rare-earth salt solution or a mixed solution of rare-earth salt solution and ammonium salt solution, filtering, and water-washing, an inorganic oxide binder and a natural mineral, slurring and shaping into shaped bodies; hydrothermally calcining shaped bodies in an atmosphere condition where a pressure is externally applied and an aqueous solution containing an acidic substance or an alkaline substance is externally added; and then ammonium-exchanging to remove the alkali metal. The present invention optimizes and shortens the preparation process of the catalyst, which can reduce the preparation cost, and the prepared catalyst has excellent heavy oil conversion ability, higher gasoline and diesel yield, lower coke selectivity, and relatively reduces the used amount of the molecular sieve in the catalyst.

Figure 2