

Abstract

Disclosed is an aluminosilicate molecular sieve catalyst, its preparation and application thereof, the catalyst shows a desorption curve having three peaks P1, P2 and P3 in its NH₃-TPD pattern, and the desorption temperatures corresponding to the summits of the three peaks P1, P2 and P3 are respectively in a range of 180-220 °C, 250-290 °C and 370-410 °C. The catalyst shows a higher activity, selectivity and stability when used for producing alkylaromatic hydrocarbons by gas-phase alkylation of aromatics with olefins.

Fig. 3