

Abstract

The present invention discloses a ZSM-23 zeolite and a process for preparing the same and use thereof. The total acid amount of said ZSM-23 zeolite is 0.05-0.25 mmol/g, preferably, 5 0.06-0.22 mmol/g, more preferably, 0.06-0.20 mmol/g; the strong acid content of said ZSM-23 zeolite is 5-33%, preferably, 7-33%, more preferably, 9-33%, or further preferably, 7-31%, further more preferably, 10-28% of the total acid amount; wherein the strong acid refers to an acid having a desorption temperature of 350°C or higher in an NH₃ temperature programmed desorption (NH₃-TPD). The ZSM-23 zeolite has a low strong acid content, and the 10 preparation process of the ZSM-23 zeolite is simple.

FIG. 2