

Abstract

The present invention discloses a SCM-38 molecular sieve and preparation process and use thereof. The SCM-38 molecular sieve is a phosphorus-aluminium or silicon-phosphorus-aluminium molecular sieve, the SCM-38 molecular sieve shows the following diffraction peak feature in its XRD spectrum: X-ray diffraction peaks appear at 2θ of 7.20 ± 0.1 , 10.81 ± 0.1 , 11.60 ± 0.1 , 14.32 ± 0.1 , 21.39 ± 0.1 , 21.83 ± 0.1 , 27.31 ± 0.1 , 28.72 ± 0.1 , wherein the most intense peak appears at 2θ of 7.20 ± 0.1 . The SCM-38 molecular sieve of the present invention can be used in catalysts.

Fig. 3