

## **Abstract**

The invention discloses a Y-type molecular sieve and a preparation method therefor. The grain size of the molecular sieve is 20-100nm, preferably 40-70nm, and more preferably 50-60nm. The molar ratio of silica/alumina in the molecular sieve is 4.5-7, preferably 5.0-6.5, and more preferably 6.0-6.5. The proportion of 40-70nm grains in the molecular sieve that is measured by means of a dynamic photoelectron scattering method is 80%-95%, and preferably 85%-93%. The Y-type molecular sieve provided by the present invention has a small grain size, concentrated grain distribution, high silica-alumina ratio and good hydrothermal stability, and can meet the needs of industrial production. When the Y-type molecular sieve is used for preparing a catalyst, the performance of the catalyst is stable.