

Abstract

Disclosed are an aluminophosphate molecular sieve SCM-18, its preparation and application thereof, the molecular sieve having a schematic chemical composition, expressed on a molar basis, of $\text{Al}_2\text{O}_3 \cdot n \text{ P}_2\text{O}_5$, wherein n represents a phosphorus to aluminum molar ratio, and is in a range of about 0.8-1.2. The aluminophosphate molecular sieve has a unique X-ray diffraction pattern, and can be used as an adsorbent, a catalyst or a catalyst carrier.

10 Fig. 2