

Abstract

A phosphorus-modified MFI-structured molecular sieve, which is characterized in that the molecular sieve has a K value, satisfying: $70\% \leq K \leq 90\%$; for example, $75\% \leq K \leq 90\%$; further for example, $78\% \leq K \leq 85\%$; wherein, the K value is as defined in the specification; the present invention also relates to a cracking auxiliary or cracking catalyst comprising the phosphorus-modified MFI molecular sieve, and a process of preparing the same and use thereof.