

Abstract

A catalytic cracking catalyst, a preparation method therefor, and an application thereof. The catalytic cracking catalyst includes a cracking active component, a high specific heat capacity matrix material, a clay, and a binder. The high specific heat capacity matrix material includes at least 5% by weight of manganese oxide, and the specific heat capacity thereof is 1.3-2.0 J/(g·K). The preparation method for the catalytic cracking catalyst comprises: mixing and pulping the cracking active component, the high specific heat capacity matrix material and/or a precursor thereof, the clay, and the binder, and then performing spray drying, calcining, washing, filtering, and drying. The catalytic cracking catalyst has good resistance to metal contamination and good heavy oil conversion ability, is applicable to heavy oil catalytic cracking, and improves light oil yield.

Figure 1