

Method for Preparing Noble Metal Hydrogenation Catalyst, Noble Metal Hydrogenation Catalyst and Use thereof

ABSTRACT

Disclosed are a method for preparing a noble metal hydrogenation catalyst comprising preparing a carrier from a molecular sieve having a 10-member ring structure and/or an amorphous porous material; preparing a noble metal impregnation solution from one or more of compounds of noble metals Pt, Pd, Ru, Rh, Re, and Ir and deionized water or an acid solution; and preparing noble metal impregnation solutions in a concentration gradient ranging from 0.05 to 5.0 wt% with deionized water, and sequentially impregnating the carrier with the impregnation solutions from low to high concentrations during the carrier impregnation process, or preparing a noble metal impregnation solution at a low concentration ranging from 0.05 to 0.5 wt% and impregnating the carrier by gradually increasing the concentration of the noble metal impregnation solution to 2.0 to 5.0 wt% in the impregnation process, followed by homogenization, drying, and calcination, as well as a noble metal hydrogenation catalyst, use thereof, and a method for preparing lubricant base oil. The catalyst according to the present invention has high activity and stability, and the produced lubricant base oil shows a high viscosity index and a low pour point.

(No Suitable Figure)