

Abstract

Disclosed in the present invention are a composite oxide support, a supported catalyst and hydrogenated nitrile butadiene rubber and a preparation method therefor and a use thereof. The composite oxide support comprises: SiO_2 and a Group IVB metal oxide, wherein the Group IVB metal oxide is TiO_2 and/or ZrO_2 , and the composite oxide support has the surface characteristics that three characteristic peaks are present in the infrared spectrum within the range of $610\text{-}720\text{ cm}^{-1}$ and another three characteristic peaks are present in the infrared spectrum within the range of $2840\text{-}2970\text{ cm}^{-1}$. The composite oxide support of the present invention can significantly improve the dispersion of active components on the surface of a catalyst and significantly improve the hydrogenation activity of the catalyst. The supported catalyst of the present invention is used in combination with a homogeneous catalyst for hydrogenation saturation of a high molecular polymer material at a low temperature and pressure, and the resulting high molecular polymer (especially hydrogenated nitrile butadiene rubber) product has a high degree of hydrogenation. In addition, the supported catalyst of the present invention can be reused multiple times, and thereby improving the recyclability of the catalyst, reducing the preparation costs.

[Fig. 1]