

ABSTRACT

The present invention relates to a hydrotreating catalyst composed of a carrier having a Brønsted acid content of at least 50 μ mol/g such as a silica-alumina carrier or a silica-alumina-third component carrier, in which the silica is dispersed to high degree and a Brønsted acid content is at least 50 μ mol/g, and at least one active component (A) selected from the elements of Group 8 of the Periodic Table and at least one active component (B) selected from the elements of Group 6 of the Periodic Table, supported on said carrier. The present invention also relates to a method for hydrotreating hydrocarbon oils using the same.

The present invention provides a hydrotreating catalyst, excellent in tolerance to the inhibiting effect by hydrogen sulfide, high in desulfurization activity, and capable of exhibiting notable effects for deep desulfurization of hydrocarbon oils containing high contents of sulfur, in particular gas oil fractions containing difficult-to-remove sulfur compounds.

The hydrotreating catalyst of the present invention is also very effective for hydrodenitrogenation, hydrocracking, hydrodearomatization, hydroisomerization, hydrofining and the like of hydrocarbon oils.