

ABSTRACT

The present invention provides a hydrodesulfurization catalyst having higher performance than conventional catalysts, comprising at least one type of metal component selected from VIA and VIII groups of the periodic table, supported on a support having a diffraction peak area indicating a crystal structure of boehmite (020) planes measured by an X-ray diffraction analysis that is 1/10 or greater of a diffraction peak area indicating the aluminum crystalline structure assigned to γ -alumina (440) planes, the molar ratio of the metal component selected from VIII group to the metal component selected from VIA group being from 0.13 to 0.22.