

HYDROCRACKING CATALYST FOR HEAVY OIL

ABSTRACT

5 A catalyst for hydrocracking of heavy oil which comprises a support
comprising crystalline aluminosilicate and a porous inorganic oxide
excluding the crystalline aluminosilicate and an active metal supported on
the support, wherein (a) the support comprises the crystalline
aluminosilicate in an amount of 18% by mass or greater and smaller than
10 45% by mass and the porous inorganic oxide in an amount exceeding 55%
by mass and of 82% by mass or smaller based on a sum of the amount of
the crystalline aluminosilicate and the amount of the porous inorganic
aluminosilicate, (b) the active metal is at least one metal selected from
molybdenum, tungsten and nickel, and (c) the distribution of pores in the
15 catalyst for hydrocracking of heavy oil is such that a volume of pores
having a diameter of 500 to 10,000 Å is 10% or smaller and a volume of
pores having a diameter of 100 to 200 Å is 60% or greater based on a
volume of entire pores having a diameter of 50 to 10,000 Å. The catalyst
exhibits excellent desulfurizing function and excellent activity for
20 decomposition of fractions having a high boiling point of 525°C or higher
such as the vacuum residue.

No Figure