

## **Abstract**

The present invention relates to the technical field of petrochemical, and disclosed are an oil modification catalyst and a preparation method therefor, an oil modification method, and an oil adsorptive desulfurization modification system. On the basis of the total amount of the catalyst, the catalyst comprises 65-85wt% of carrier, 8-15wt% of primary active ingredient, 2-5wt% of secondary active ingredient, and 5-15wt% of binder; on the basis of the total amount of the carrier, the carrier comprises 65-85wt% of zinc oxide, 8-22wt% of alumina, 0-5wt% of titanium oxide or zirconia, and 4-10wt% of modified molecular sieve; the content of titanium oxide and the content of zirconium oxide are not zero at the same time; the modified molecular sieve comprises a molecular sieve and a modification element; the molecular sieve is selected from a USY and/or Beta molecular sieve; and the modification element is selected from lanthanum and/or palladium. The catalyst provided by the present invention integrates efficient desulfurization, efficient demetallization, and efficient viscosity reduction, and is particularly suitable for treating medium and heavy oil.