

ABSTRACT

Modified particles obtained by contacting dry particles(a) with an organometallic compound(b), and
5 subsequently a compound(c) having a functional group containing active hydrogen or a non-proton donative Lewis basic functional group and an electron attractive group; a carrier comprising said particles; a catalyst component for olefin polymerization comprising said particles; a
10 catalyst for olefin polymerization comprising said particles(A) and a transition metal compound(B), or an additional organometallic compound (C) therewith; and a method for producing an olefin polymer with said catalyst for olefin polymerization.

15 According to the present invention, there is provided a catalyst for polymerizing an olefin giving an olefin polymer excellent in particle properties with a high activity when applied to a slurry polymerization or gas phase polymerization, and a method for producing a olefin
20 polymer using said catalyst.