

ABSTRACT

The present invention relates to a method of producing water-absorbent resin particles in which a median particle size of primary particles (d) and a median particle size of secondary particles (D) satisfy the relationship of the formula, $5d/3+150 < D < 5d+150$, comprising the steps of:

(1) subjecting a water-soluble ethylenically unsaturated monomer to a first-step reversed phase suspension polymerization reaction, in a petroleum hydrocarbon solvent, in the presence of a dispersion stabilizer, to give spherical primary particles having a median particle size (d) of from 30 to 130 μm ;

(2) cooling the polymerization reaction solution, to precipitate the dispersion stabilizer; and

(3) carrying out a second-step reversed phase suspension polymerization reaction by adding the water-soluble ethylenically unsaturated monomer for the second step to the polymerization reaction solution to agglomerate the primary particles, to give secondary particles having a median particle size (D) of from 200 to 500 μm .