

**PRODUCTION PROCESS OF POLYACRYLIC ACID (SALT)
WATER-ABSORBENT RESIN**

ABSTRACT

The present invention allows for production, with a high productivity, of a water-absorbent resin having an improved relationship between absorption capacity and water-soluble polymer which are conflicting properties of the water-absorbent resin, being easily controlled for polymerization reaction, being of no odor, being less colored, and being of high absorption properties. In the present invention, acrylic acid composition is neutralized with a basic composition having an iron content of 0.2 to 5 ppm by weight (relative to a basic compound exclusive of a solvent); and then polymerizing a resultant neutralized product, the acrylic acid composition including: (i) a methoxyphenol content of 10 to 200 ppm by weight relative to the weight of acrylic acid; and (ii) at least one compound content of which is 0 to 10 ppm by weight relative to the weight of acrylic acid, the compound being selected from the group consisting of protoanemonin and furfural.