METHOD FOR PRODUCTION OF WATER-ABSORBING POLYMERS

Abstract

A process for producing a water-absorbing polymer by polymerizing a monomer solution and drying the resulting hydrogel by means of a heated gas stream comprises

- effecting the drying in two or more temperature zones, and/or

- the gas stream is flowed against the hydrogel upwardly in the upstream sector of the belt dryer and downwardly in the downstream sector of the belt dryer, the direction of flow being reversed at a water content of 15% to 45% by weight for the hydrogel, and/or

- the hydrogel layer is flowed against in a belt dryer upwardly to some extent at least, the gas velocity being 5% to 30% of the gas velocity required to lift the hydrogel off the belt,

also apparatus for carrying out the process and use of the water-absorbing polymers produced by the process to produce hygiene articles.