to be lowered.

PRIOR ART DOCUMENT

Patent Documents

Patent Document 1: Japanese Unexamined Patent Application, Publication No. H09-136966

Patent Document 2: Japanese Unexamined Patent Application, Publication No. H11-347402

SUMMARY OF THE DISCLOSURE

Problems to be Solved by the disclosure

The present disclosure is proposed in view of the foregoing situations, and has an object to provide a water-absorbent resin in which in the formation of an absorbent material forming an absorbent article, dispersion is satisfactory even in a moisture absorption state, which prevents the occurrence of troubles at the time of manufacturing of the absorbent article and which allows efficient manufacturing; and an absorbent article using an absorbent material containing the water-absorbent resin.

Means for Solving the Problems

The present inventors have performed thorough studies to solve the problems described above. Consequently, they have found that a water-absorbent resin in which the yellow index and the gel strength thereof are a predetermined value or less is excellent in flowability after moisture absorption. Specifically, the present disclosure provides the following.

(1) According to the present disclosure, in one aspect, there is provided

a water-absorbent resin, where the water-absorbent resin is obtained by polymerizing a water-soluble ethylenically unsaturated monomer in the presence of an internal-crosslinking agent and in the presence of an azo based compound and a peroxide, and performing post-crosslinking thereon with a post-crosslinking agent, a monomer of 70 to 100 mol% in the water-soluble ethylenically unsaturated monomer is acrylic acid or salt thereof, and the water-absorbent resin satisfies requirements below:

(A) yellow index is 5.0 or less; and

(B) gel strength is 1800 Pa or less.

(2) In the water-absorbent resin of the invention according to the above item (1), a water-absorption capacity of physiological saline under a load of 4.14 kPa is 16 ml/g or more.

(3) According to the present disclosure, there is provided an absorbent article that uses an absorbent material containing the water-absorbent resin according to the above item (1) or (2).

Effects of the Invention

In the present disclosure, even in a moisture absorption state, the water-absorbent resin has satisfactory dispersion and can escape the occurrence of troubles at the time of manufacturing absorbent article such as blocking within piping and the formation of a bridge within a powder hopper. Therefore it is possible to efficiently manufacture an absorbent article.

BRIEF DESCRIPTION OF THE DRAWINGS

[Fig. 1] A pattern diagram showing the schematic arrangement of a apparatus for measuring, in a water-absorbent

CLAIMS

1. A water-absorbent resin,

wherein the water-absorbent resin is obtained by polymerizing a water-soluble ethylenically unsaturated monomer in the presence of an internal-crosslinking agent and in the presence of an azo based compound and a peroxide, and performing post-crosslinking thereon with a post-crosslinking agent,

a monomer of 70 to 100 mol% in the water-soluble ethylenically unsaturated monomer is acrylic acid or salt thereof, and the water-absorbent resin satisfies the requirements below:

(A) yellow index is 5.0 or less;

(B) gel strength is 1800 Pa or less; and

(C) a water-absorption capacity of physiological saline under a load of 4.14 kPa is 16 ml/g or more.

2. An absorbent article that uses an absorbent material comprising the water-absorbent resin according to claim 1.