In another aspect, there is provided agglomerated superabsorbent particles obtainable by a process as defined above, having a centrifuge retention capacity of 35 to 80 g/g and a free swell rate of 0.6 to 1.6 g/g s.

In another aspect, there is provided a hygiene article comprising

(A) an upper liquid-permeable layer,
(B) a lower liquid-impermeable layer,
(C) a liquid-absorbing storage layer between layer (A) and layer (B), comprising from 0% to 30% by weight of a fibrous material and from 70 to 100% by weight of superabsorbent particles as defined above,
(D) optionally an acquisition and distribution layer between layer (A) and layer (C), comprising from 80% to 100% by weight of a fibrous material and from 0 to 20% by weight of water-absorbing polymer particles as defined above,
(E) optionally a fabric layer directly above and/or beneath layer (C) and
(F) further optional components.

Polymer particles having a particle size of preferably 200 µm or less, more preferably 150 µm or less and most preferably 120 µm or less are removed. The particle size can be removed by means of a sieve having the corresponding mesh size. Polymer particles which pass through a sieve having a mesh size of x µm accordingly have a particle size of x µm or less.

The polymer particles can be removed by means of a sieve having a mesh size of 250 µm or less, preferably 200 µm or less, more preferably 150 µm or less and most preferably 120 µm or less.

6. The process according to any of claims 1 to 5, wherein monomer solution 1 is polymerized by dropletizing polymerization.

7. The process according to claim 6, wherein the polymer particles are removed from the offgas of the dropletizing polymerization by means of a filter or cyclone.

8. The process according to any of claims 1 to 5, wherein monomer solution 1 is polymerized by suspension polymerization and the resulting polymer particles are dried.

9. The process according to any of claims 1 to 5, wherein monomer solution 1 is polymerized by solution polymerization and the resulting polymer particles are dried and comminuted.

10. The process according to claim 8 or 9, wherein the polymer particles are removed by means of a sieve having a mesh size of 250 µm or less.

11. The process according to claim 8 or 9, wherein the polymer particles are removed by means of a sieve having a mesh size of 150 µm or less.

12. Agglomerated superabsorbent particles obtainable by a process of claims 1 to 11, having a centrifuge retention capacity of 35 to 80 g/g and a free swell rate of 0.6 to 1.6 g/g s.

13. Agglomerated superabsorbent particles according to claim 12, having a centrifuge retention capacity of 36 to 70 g/g and a free swell rate of 0.7 to 1.4 g/g s.

14. Agglomerated superabsorbent particles according to claim 12 or 13, having a centrifuge retention capacity of 37 to 60 g/g and a free swell rate of 0.8 to 1.2 g/g s.

15. A hygiene article comprising

(A) an upper liquid-permeable layer,
(B) a lower liquid-impermeable layer,
(C) a liquid-absorbing storage layer between layer (A) and layer (B), comprising from 0% to 30% by weight of a fibrous material and from 70 to 100% by weight of superabsorbent particles according to any of claims 12 to 14,
(D) optionally an acquisition and distribution layer between layer (A) and layer (C), comprising from 80% to 100% by weight of a fibrous material and from 0 to 20% by weight of water-absorbing polymer particles according to any of claims 12 to 14,
(E) optionally a fabric layer directly above and/or beneath layer (C) and
(F) further optional components.