CLAIMS

1. A process for preparing polyamide granules with heat resistance properties, by wet impregnation of the polyamide granules with a single aqueous solution comprising at least one heat stabilizer, wherein the polyamide granules are placed in contact with the aqueous solution by
   a. spraying the aqueous solution on the stirred granules,
   b. optionally followed by spraying a rinsing liquid on the stirred granules,
   c. followed by continued stirring of the granules for 0.1 to 40 minutes, and
   d. discharging the granules,
   the total amount of aqueous solution relative to the polyamide being less than or equal to 1% by weight.

2. The process as claimed in claim 1, in which the heat stabilizer is a mixture of alkali metal or alkaline-earth metal halide and of copper halide.

3. The process as claimed in claim 2, in which the alkali metal halide is potassium or sodium iodide.

4. The process as claimed in claim 2, in which the copper halide is copper iodide.

5. The process as claimed in one of claims 2 to 4, in which the heat stabilizer is a mixture of potassium iodide and copper iodide.

6. The process as claimed in one of claims 2 to 5, in which the ratio between the number of moles of halide and the number of moles of copper is greater than or equal to 7/ 1.

7. The process as claimed in claim 5, in which the copper iodide is present in an amount of less than or equal to 6% by weight in an aqueous solution of potassium iodide at 50% by weight.

8. The process as claimed in one of claims 1 to 7, in which the amount of aqueous solution relative to the polyamide is between 0.15% and 1% by weight.

9. The process as claimed in one of claims 1 to 8, in which the polyamide is polyamide 66.

10. The process as claimed in one of claims 1 to 9, in which the polyamide granules obtained after the placing in contact with at least the aqueous solution comprising at least one heat stabilizer are subjected directly to a solid-phase post-condensation step.

11. Process for the manufacture of industrial yarns, wherein polyamide granules are prepared according to the process as claimed in one of claims 1 to 10, and wherein the obtained granules are used to manufacture the industrial yarns.

12. Process according to claim 11, wherein the industrial yarns are obtained by spinning the granules derived from the process as claimed in one of claims 1 to 10.

13. Process for the manufacture of woven articles wherein yarns are obtained according to the process as claimed in claim 11 or 12, and the articles are obtained from these yarns.

14. Process according to claim 13, wherein the woven articles are airbags or tire cords.

CLAIMS

1. A process for preparing polyamide granules with heat resistance properties, by wet impregnation of the polyamide granules with a single aqueous solution comprising at least one heat stabilizer, wherein the polyamide granules are placed in contact with the aqueous solution solely by the following steps consisting of:
   a. spraying the aqueous solution on the stirred granules,
   b. optionally followed by spraying a rinsing liquid on the stirred granules,
   c. followed by continued stirring of the granules for 0.1 to 40 minutes, and
   d. discharging the granules,
   the total amount of aqueous solution relative to the polyamide being less than or equal to 1% by weight.

2. The process as claimed in claim 1, in which the heat stabilizer is a mixture of alkali metal or alkaline-earth metal halide and of copper halide.

3. The process as claimed in claim 2, in which the alkali metal halide is potassium or sodium iodide.

4. The process as claimed in claim 2, in which the copper halide is copper iodide.

5. The process as claimed in one of claims 2 to 4, in which the heat stabilizer is a mixture of potassium iodide and copper iodide.

6. The process as claimed in one of claims 2 to 5, in which the ratio between the number of moles of halide and the number of moles of copper is greater than or equal to 7/ 1.

7. The process as claimed in claim 5, in which the copper iodide is present in an amount of less than or equal to 6% by weight in an aqueous solution of potassium iodide at 50% by weight.

8. The process as claimed in one of claims 1 to 7, in which the amount of aqueous solution relative to the polyamide is between 0.15% and 1% by weight.

9. The process as claimed in one of claims 1 to 8, in which the polyamide is polyamide 66.

10. The process as claimed in one of claims 1 to 9, in which the polyamide granules obtained after the placing in contact with at least the aqueous solution comprising at least one heat stabilizer are subjected directly to a solid-phase post-condensation step.

11. Process for the manufacture of industrial yarns, wherein polyamide granules are prepared according to the process as claimed in one of claims 1 to 10, and wherein the obtained granules are used to manufacture the industrial yarns.

12. Process according to claim 11, wherein the industrial yarns are obtained by spinning the granules derived from the process as claimed in one of claims 1 to 10.

13. Process for the manufacture of woven articles wherein yarns are obtained according to the process as claimed in claim 11 or 12, and the articles are obtained from these yarns.

14. Process according to claim 13, wherein the woven articles are airbags or tire cords.