(δ) discharging from the distillation column water comprising aniline or aniline and N-methylaniline; and

(ε) discharging from the distillation column an aqueous aniline-free or aniline-free and N-methylaniline-free leucoindigo solution.

13. Method of item 11 or 12, wherein said (γ1) liquid stream and said (γ2) water stream are fed into the column via inlets in the sidewalls of the column, and said (δ) water comprising aniline or aniline and N-methylaniline is discharged at the top of the column, and the (ε) aqueous aniline-free or aniline-free and N-methylaniline-free leucoindigo solution is discharged at the bottom of the column.

14. Method of any one of the preceding items, wherein the distillation column is a column provided with trays or packing materials.

15. Stable aqueous leucoindigo solution comprising an aromatic amine in the form of aniline or aniline and N-methylaniline, wherein said leucoindigo is in the form of an alkali metal salt;

wherein the concentration of the aromatic amine is below 40 ppm determined according to ISO 14362-1:2017(E); and

wherein the concentration of the leucoindigo salt is in a concentration range of from 10 to 45 % by weight based on the total weight of the solution, and wherein the stability of the solution is measured at a temperature of 23 °C; or

wherein the concentration of the leucoindigo salt is in a concentration range of from 45 to 65 % by weight based on the total weight of the solution, and wherein the stability of the solution is measured at a temperature of 60 °C.

16. Stable aqueous leucoindigo solution of item 15, wherein the concentration of the aromatic amine is below 30 ppm or below 20 ppm.

17. Stable aqueous leucoindigo solution of item 15 or 16, wherein the concentration of the aromatic amine is below 10 or 5 ppm.

18. Stable aqueous leucoindigo solution as defined herein, obtainable by a method as defined herein.

19. Method of making indigo, comprising step (D):

    (D) oxidizing the aqueous leucoindigo solution as defined herein.

20. Method of item 19, comprising step (C) prior to step (D):

    (C) treating a textile with the leucoindigo solution as defined in any one of items 15 to 18.

21. In yet another aspect, the present disclosure refers to method of making indigo, comprising steps (I) and (III):

    (I) performing a method as defined herein;

    (III) oxidizing the leucoindigo solution obtained in step (I).

22. Method of item 21, comprising step (II) prior to step (III):

    (II) treating a textile with the leucoindigo solution obtained in step (I).

CLAIMS

1. Method of removing an aromatic amine in the form of aniline or aniline and N-methylaniline from an aqueous leucoindigo solution comprising said aromatic amine in order to obtain a purified leucoindigo solution, wherein said leucoindigo is in the form of an alkali metal salt, the method comprising steps (A) and (B):

   (A) adding water to the aqueous leucoindigo solution in order to obtain a diluted leucoindigo solution; and

   (B) subjecting the diluted aqueous leucoindigo solution obtained in step (A) to distillation such that water is distilled off in a weight which at least equals the weight of said aqueous leucoindigo solution used in step (A).

2. Method of making an aqueous aniline-free or aniline-free and N-methylaniline-free leucoindigo solution from an aqueous leucoindigo solution comprising aniline or aniline and N-methylaniline, the concentration of aniline or aniline and N-methylaniline being determined according to ISO 14362-1:2017(E), wherein said leucoindigo is in the form of an alkali metal salt, the method comprising steps (A) and (B):

   (A) adding water to the aqueous leucoindigo solution in order to obtain a diluted leucoindigo salt solution; and

   (B) subjecting the diluted aqueous leucoindigo solution obtained in step (A) to distillation such that water is distilled off in a weight which at least equals the weight of said aqueous leucoindigo solution used in step (A).

3. Method of claim 1 or 2, wherein the concentration of the leucoindigo salt in the solution used in step (A) is in the range of from 5 to 65 % by weight, based on the total weight of the solution.

4. Method of any one of claims 1 to 3, wherein the concentration of said aromatic amine in the solution used in step (A) is in the range of from 2,000 ppm to 10,000 ppm.

5. Method of any one of the preceding claims, wherein the concentration of aniline in the solution used in step (A) is in the range of from 1,000 ppm to 3,000 ppm and the concentration of N-methylaniline is in the range of from 500 to 2,000 ppm

6. Method of any one of the preceding claims, wherein in step (A) water is added in a weight sufficient to allow in step (B) distilling off water in a weight which at least is one and half times the weight of said aqueous leucoindigo solution used in step (A).

7. Method of any one of the preceding claims, wherein in step (A) water is added in a weight sufficient to allow in step (B) distilling off water in a weight which at least is twice the weight of said aqueous leucoindigo solution used in step (A).

8. Method of any one of the preceding claims, wherein in step (B) distillation is performed under a flow of inert gas.

9. Method of any one of the preceding claims, wherein the weight of water added in step (A) and the water distilled off in step (B) are selected such that after step (B) the concentration of the leucoindigo salt in the purified solution is in the range of from 40 to 65 % by weight, based on the total weight of the solution.

10. Method of claim 9, wherein the concentration is adjusted to a range of from 10 to 45 % by weight, if necessary by addition of water.

11. Method of any one of the preceding claims, wherein step (A) comprises:

    (α) providing a liquid stream comprising said aqueous leucoindigo solution comprising said amine(s);

    (β) providing a water stream;

    (γ) bringing into contact said liquid stream with said water stream.

12. Method of claim 11, wherein step (γ) comprises steps (γ1) and (γ2), and step (B) comprises steps (δ) and (ε):

    (γ1) feeding said liquid stream and

    (γ2) feeding said water stream

    into a distillation column configured to bring into contact said liquid stream with said aqueous stream;

    (δ) discharging from the distillation column water comprising aniline or aniline and N-methylaniline; and

    (ε) discharging from the distillation column an aqueous aniline-free or aniline-free and N-methylaniline-free leucoindigo solution.

13. Method of claim 11 or 12, wherein said (γ1) liquid stream and said (γ2) water stream are fed into the column via inlets in the sidewalls of the column, and said (δ) water comprising aniline or aniline and N-methylaniline is discharged at the top of the column, and the (ε) aqueous aniline-free or aniline-free and N-

methylaniline-free leucoindigo solution is discharged at the bottom of the column.

14. Method of any one of the preceding claims, wherein the distillation column is a column provided with trays or packing materials.

15. Method of making indigo, comprising steps (I) and (III):

    (I) performing a method as defined in any one of claims 1 to 14, preferably claims 9 or 10 or any one of claims 11 to 14 as far as depending on claim 9 or 10;

    (III) oxidizing the leucoindigo solution obtained in step (I).

16. Method of claim 15, comprising step (II) prior to step (III):

    (II) treating a textile with the leucoindigo solution obtained in step (I).