CLAIMS

1. Process for the preparation of a solution of a non-caking agent, wherein a concentrate of the non-caking agent is circulated in a loop (6) and wherein the concentrate is subsequently diluted by water to obtain the solution.

2. Process according to claim 1 wherein a flow of the concentrate is drawn from the circulation loop (6) and mixed with a flow of water.

3. Process according to claim 1 or 2 wherein the obtained solution is subsequently fed into a second recirculation loop (12).

4. Process according to claim 3, wherein a flow of solution is drawn off from the second recirculation loop for being dosed into an amount of salt.

5. Process according to claim 3 or 4 wherein the temperature in the first and/or the second circulation loop (6, 12) is below 20°C.

6. Process according to any one of claims 3 to 5 wherein the first and/or the second circulation loop (6, 12) have an interior atmosphere with an oxygen content of below 1 vol%, of the gaseous interior content of the circulation loop.

7. Process according to any one of claims 3 – 6 wherein the pH of the solution in the second circulation loop (12) is between 3.5 and 5.

8. Process according to any one of the preceding claims wherein the solution is passed via one or more static mixers (9) in and/or between and/or upstream of the circulation loops (6, 12).

9. Process according to any one of the preceding claims wherein the flow of solution is passed via one or more pH measurement stations (18, 19) and wherein the pH is adjusted in case the measured pH is outside a prescribed range.

10. Process according to any one of the preceding claims wherein the non-caking agent comprises the Fe^{3+} salt of meso-tartaric acid (FeMTA).

11. Dosing station (1) for preparing an aqueous solution of a non-caking agent comprising a circulation loop (6) with a first inlet connected to a supply for a concentrate of a non-caking agent (3, 4, 5), a second inlet connected to a supply of water (10), and an outlet (16) for discharge of the solution, said circulation loop (6) further comprising one or more pH measurement stations (18).

12. Dosing station according to claim 11 further comprising a second circulation loop (12) fed by the outlet of the first recirculation loop (6), the second recirculation loop comprising a discharge line (15) for continuously drawing off solution for discharge to a dispensing unit (16).

13. Dosing station according to claim 12, wherein said second circulation loop further comprises one or more pH measurement stations (19).

14. Dosing station according to any one of claims 10, 11, or 12 further comprising a density control unit (30) for adjusting water and concentrate flows.

CLAIMS

1. Process for the preparation of a solution of a non-caking agent comprising an iron salt of an organic acid with a ferric component and a ferrous component of less solubility than said ferric component, wherein a concentrate of the non-caking agent is circulated in a loop (6) and wherein the concentrate is subsequently diluted by water to obtain the solution.

2. Process according to claim 1 wherein a flow of the concentrate is drawn from the circulation loop (6) and mixed with a flow of water.

3. Process according to claim 1 or 2 wherein the obtained solution is subsequently fed into a second recirculation loop (12).

4. Process according to claim 3, wherein a flow of solution is drawn off from the second recirculation loop for being dosed into an amount of salt.

5. Process according to claim 3 or 4 wherein the temperature in the first and/or the second circulation loop (6, 12) is below 20°C.

6. Process according to any one of claims 3 to 5 wherein the first and/or the second circulation loop (6, 12) have an interior atmosphere with an oxygen content of below 1 vol%, of the gaseous interior content of the circulation loop.

7. Process according to any one of claims 3 - 6 wherein the pH of the solution in the second circulation loop (12) is between 3.5 and 5.

8. Process according to any one of the preceding claims wherein the solution is passed via one or more static mixers (9) in and/or between and/or upstream of the circulation loops (6, 12).

9. Process according to any one of the preceding claims wherein the flow of solution is passed via one or more pH measurement stations (18, 19) and wherein the pH is adjusted in case the measured pH is outside a prescribed range.

10. Process according to any one of the preceding claims wherein the non-caking agent comprises the Fe^{3+} salt of meso-tartaric acid (FeMTA).