

Experiment 13: Treatment of paper with chitosan hydrochloride

Duration: 30 minutes.

Equipment: 2 crystallization dishes (Ø 14 cm), 2 pincers, hair-drier, balance.

Reagents and materials: Chitosan hydrochloride, demineralized water, paper (ca. 8x8 cm²), ink.

Procedure: In a crystallization dish 1 g of chitosan hydrochloride is dissolved in water. Now some pieces of paper are dipped into the solution and then dried in hot air. With different paper samples this process is performed once, twice and three times. Ink drops are put onto untreated and treated paper samples. Observation: The often the paper is treated with chitosan hydrochloride, the slower the ink is soaked up.

Faults and precautions: The ink drops have to have the same size for a comparison of the formed spots.

Waste disposal: The treated paper is added to the waste jar for solids. The dipping solutions are poured down the sink."

