

Quantification and biodegradability assessment of meso-2,3-dimercaptosuccinic acid adsorbed on iron oxide nanoparticles

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Electronic Supplementary Information (ESI)

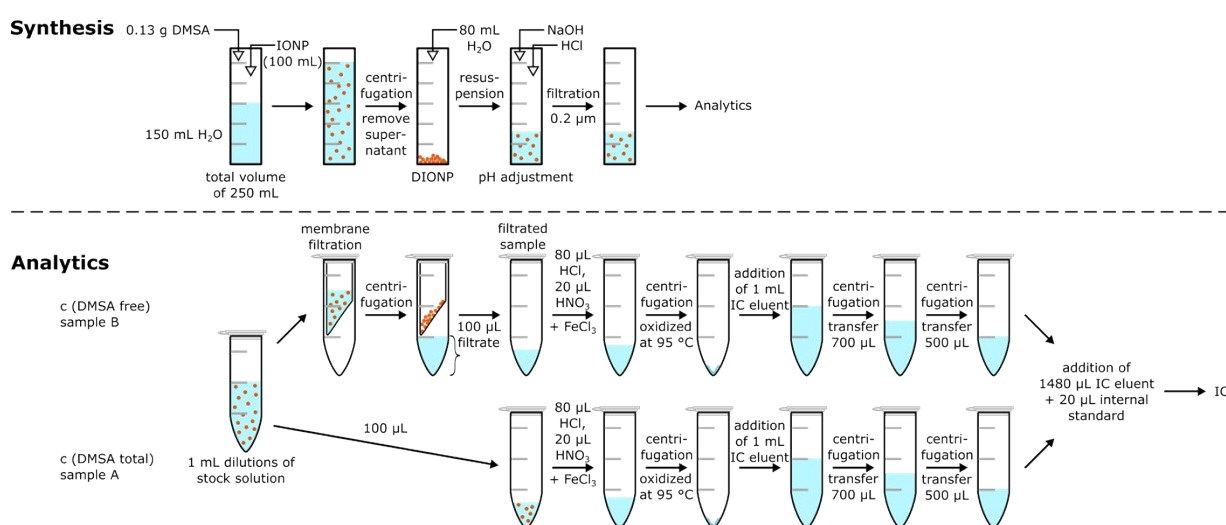


Fig. S1: Flowchart for sample preparation to determine bound DMSA concentrations.

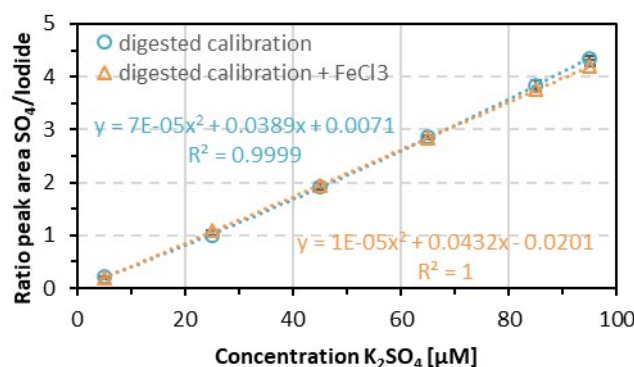


Fig. S2: Calibration and determination of recovery rates after the digestion process of K_2SO_4 over the concentration range from 5 to 95 μM with added $FeCl_3$ (0.125 mM). Data represent mean values \pm SD ($n = 3$).

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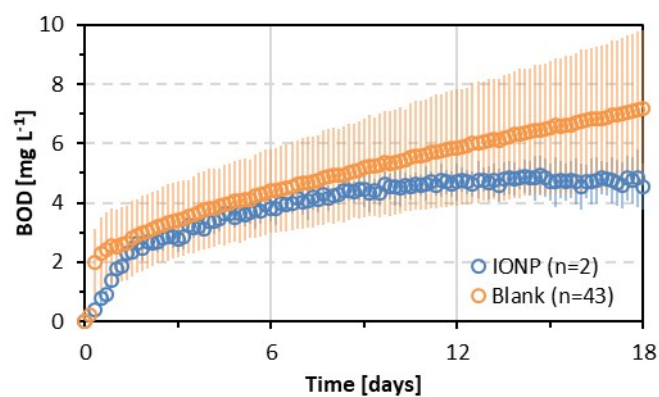


Fig. S3: Biochemical oxygen demand (BOD) of the sample controls (blank and uncoated iron oxide nanoparticles, IONP) for the biodegradation test system. Data represent mean values \pm SD (error range as an area of coloured lines, $n = 2$ for IONP and $n = 43$ for blank).

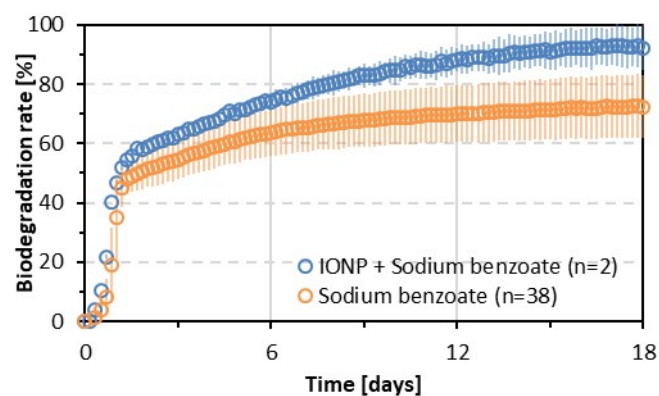


Fig. S4: Biological degradation of positive control sodium benzoate with and without the presence of IONP. Data represent mean values \pm SD (error range as an area of coloured lines, $n = 2$ for IONP and $n = 38$ for sodium benzoate control).