

Activity and Stability of Catalase in Nonionic Micellar and Reverse Micellar Systems

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Catalase activity and stability in the presence of simple micelles of Brij 35 and entrapped in reverse micelles of Brij 30 have been studied. The enzyme retains full activity in aqueous micellar solution of Brij 35. Catalase exhibits “superactivity” in reverse micelles composed of 0.1 M Brij 30 in dodecane, *n*-heptane or isooctane, and significantly lowers the activity in decaline. The incorporation of catalase into Brij 30 reverse micelles enhances its stability at 50 °C. However, the stability of catalase incubated at 37 °C in micellar and reverse micellar solutions is lower than that in homogeneous aqueous solution.

Key words: Catalase, Nonionic Surfactants, Reverse Micelle