

Physical and morphological study of D-Phe imprinted composite membrane

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D-Phe imprinted composite membrane was prepared by the phase inversion technique. Freeze dried D-Phe imprinted micro beads were prepared by suspension polymerization and dispersed as 3 % (w/w) into the D-Phe imprinted polymeric solution prepared by insitu polymerization. Surface morphology as well as various physical properties of the prepared D-Phe imprinted composite and non-composite membranes i.e., water holding capacity, percent swelling ratio and wet weight decrease with respect to time were determined and compared. The beads were uniformly dispersed inside the composite membrane matrix without any structural damages. The composite membranes showed enhancement in water holding capacity, percent swelling ratio and a reduced rate of wet weight decrease compared to simple D-Phe imprinted membranes.

References

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