

Chemoenzymatic Synthesis of Hydrogel Using Sorbitan Methacrylate as monomer

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Abstract

Biomaterial as hydrogel is materials that are used for a medical purpose. Hydrogel can be defined as materials that exhibit the ability to swell in water and retain a significant fraction of water within their structure. They have been widely used in many biomedical applications including contact lenses, wound dressings, artificial organs, and delivery carriers for bioactive agents because of their high degree of biocompatibility. Sorbitan methacrylate used to synthesis of hydrogel as monomer was synthesized from sorbitan using an immobilized lipase. The synthesis of hydrogel were based on free radical copolymerization with the EGDMA(ethylene glycol dimethacrylate) as crosslinker and AIBN(α,α' -azobis(isobutyronitrile)) as thermal initiator.

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References

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