

Pembuatan niosom berbasis maltodekstrin DE 5-10 dari pati singkong (manihot utilissima)

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20335349&lokasi=lokal>

Abstrak

Niosomes are non ionic surfactant vesicles that have potential application in the delivery of hydrophobic or amphiphilic drugs. We developed proniosomes, a dry formulation using a maltodextrin as a carrier coated with non ionic surfactant, which can be used to produce niosomes within a minutes by addition of hot water followed by agitation. A novel method is reported here for rapid preparation of proniosomes with wide range of surfactant loading. Maltodextrin DE 5-10 was hydrolyzed from tapioca starch using Thermamyl L 120 da Novo at 85o C. The result from SEM analyses shown that proniosomes appear very similar to the maltodextrin, but the surface was more smooth. Niosome suspensions which was observed under the optical microscopy and particle size analyzer were evaluated as drug carrier using ibuprofen as a model. The result provide an indication of maltodextrin DE 5-10 from tapioca starch are potentially carrier in the proniosome preparation which can be used for producing niosomes.