

ABSTRAK

PENGARUH KECEPATAN PENGADUKAN PADA PEMBUTAN TERHADAP UKURAN PARTIKEL NANOSTRUCTURED LIPID CARRIER (NLC) KOENZIM Q10

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Coenzyme Q10 functions as an antioxidant that can protect the body from damage caused by free radicals. Coenzyme Q10 is a fat-soluble compound, but has the disadvantage of poor penetration into the skin. So it is necessary to choose a delivery system that can improve stability and increase penetration, one of which is by making Nanostructured Lipid Carrier (NLC). This research aims to determine the effect of stirring speed in the manufacturing process on the particle size of preparations with the formula solid lipid myristic acid 10% and liquid lipid caprylic 7%, using 3 variations of stirring speed, namely B1 (3,500 rpm), B2 (7,000 rpm), and B3 (11,000 rpm). The preparation that has been made will be stored for 24 hours to be tested for particle size using a Particle Size Analyze (PSA) tool. The results obtained from particle size testing will be concluded with the particle size specifications, namely 10-1000 μ m [10].

Key words: coenzyme Q10, nanostructured lipid carrier, particle size, stirring speed.