## **ABSTRACT**

## THE EFFECT OF CAPRYLIC COMPOSITION ON PARTICLE SIZE OF NANOSTRUCTURED LIPID CARRIER (NLC) KOENZIM Q10

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Antiaging is a process to prevent, slow down or reverse the effect of aging. An aging process that occurs biologically is characterized by dry, scaly, rough, wrinkled skin conditions and is accompanied by the appearance of black spots. Coenzym Q10 is widely used in anti aging cosmetics, preparations because coenzyme Q10 acts as an antioxidant to protect cells from radiacls. This study aims to determine the composition of solid and liquid lipids on the physical characteristics of particle size in the optimal preparation of NLC coenzyme Q10 so as to increase the effectiveness of coenzyme Q10 as an antiaging in cosmetic preparation. This research was made in 3 nanoparticle formulas, namely F1(9%), F2 (11%) dan F3(13%). Particle size evaluation was carried out after 24 hours after the preparation was completed. The research data use Anova statistic analysis where the p value(sig) is greater than 0,05. The results showed that concentrations of liquid (Caprylic) can affect the particle size.

Keyword: Coenzym Q10, Nanostructured Lipid Carrier (NLC), Caprylic