## **ABSTRACT**

## FREEZE THAW STABILITY TEST ON COCONUT HUSK EXTRACT PEEL OFF GEL MASK PREPARATION (Cocos nucifera L.) With Hydroxypropyl methylcellulose (HPMC) as Gelling Agent

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The stability of the preparation is an important factor to pay attention to. This is because these preparations are generally produced in large quantities and require a long time in storage. Freeze thaw is a test method that uses temperature changes in cycles to evaluate the physical stability of a preparation. Generally, this method is done by storing products at low  $(4^{\circ}C)$  and high  $(40^{\circ}C)$  temperatures alternately to observe the response and resistance of the product to different temperature conditions. After storing the product in a predetermined temperature and time, a physical stability evaluation will be carried out including organoleptis tests, homogeneity tests, dispersion tests, dry time tests, and pH tests. The dispersion, dry time and pH evaluation data were then analyzed using the saphiro wilk normality test if the data is normally distributed then using the pired t-test, if not normal using Wilcoxon. The results of this study are changes in storage temperature of  $4^{\circ}C$  and  $40^{\circ}C$  for 6 cycles in freeze thaw stability tests affect organoleptis, homogeneity, dispersion and pH of the preparation of peel off gel masks coconut husk extract (Cocos nucifera L.)

Keywords: Freeze Thaw, Stability, Peel Off Mask, HPMC, Coconut Husk Extract