

ABSTRAK

Khairatun Annisa, NIM 4203210009 (2024), Preparasi dan Karakterisasi Formulasi Clay Mask Ekstrak Daun Babadotan (*Ageratum conyzoides* L.)

Penelitian ini bertujuan untuk mengetahui pengaruh basis clay mask berdasarkan sifat struktur dan komposisinya, pengaruh distribusi partikel terhadap konsistensi, serta evaluasi stabilitas clay mask. Karakterisasi yang digunakan dalam penelitian yaitu XRD, FTIR dan Mikroskop cahaya. Pengujian stabilitas clay mask dilakukan dengan metode kualitatif berdasarkan pengamatan terhadap uji pH, uji daya sebar, uji daya lekat, uji homogenitas, uji iritasi dan uji aktivitas antibakteri. Hasil penelitian menunjukkan Spektrum FTIR untuk formulasi clay mask menunjukkan adanya puncak baru pada bilangan gelombang 3310, 2120, 1430 dan 2126 cm^{-1} dimana puncak tersebut muncul disebabkan oleh bahan tambahan yang digunakan dalam formulasi kosmetik. Berdasarkan hasil Analisa, formulasi I dengan variasi basis kaolin 25% dan bentonit 1% merupakan formula yang paling stabil. Hal ini dikarenakan hasil dari semua evaluasi, formula I yang cenderung stabil mendekati dari persyaratan dari sediaan clay mask.

Kata kunci : clay mask, karakterisasi, stabilitas, daun babadotan



ABSTRACT

Khairatun Annisa, NIM 4203210009 (2024), Preparation and Characterization of Clay Mask Formulations from Babadotan Leaf Extract (*Ageratum conyzoides* L.)

This research aims to determine the effect of clay mask base based on its structural properties and composition, the effect of particle distribution on consistency, and evaluate the stability of clay masks. The characterization used in the research is XRD, FTIR and light microscope. Clay mask stability testing was carried out using a qualitative method based on observations of the pH test, spreadability test, adhesion test, homogeneity test, irritation test and antibacterial activity test. The research results show that the FTIR spectrum for the clay mask formulation shows that there are new peaks at wave numbers 3310, 2120, 1430 and 2126 cm⁻¹ where these peaks appear due to the additional ingredients used in the cosmetic formulation. Based on the analysis results, formulation I with a base variation of 25% kaolin and 1% bentonite is the most stable formula. This is because the results of all evaluations, formula I tends to be stable, approaching the requirements for clay mask preparations.

Key words: clay mask, characterization, stability, babadotan leaves

