FORMULASI DAN UJI STABILITAS FISIKA DAN pH KRIM PENCERAH KULIT HIDROKUINON 4% SERTA KOMBINASI HIDROKUINON 4%-TRETINOIN 0,1% DENGAN *POLYACRILAMIDE & C13-14 ISOPARAFFIN & LAURETH-7* DAN *CETEARYL ALCOHOL* & *CETEARYL GLUCOSIDE* SEBAGAI EMULGATOR

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ABSTRAK

Telah dilakukan penelitian stabilitas fisika sediaan krim yang mengandung basis krim tanpa bahan aktif (Formula I), 4% Hidrokuinon (Formula II) serta 4% Hidrokuinon dan 0,1% Tretinoin (Formula III) dengan bahan pengemulsi kombinasi *polyacrilamide & c13-14 isoparaffin & laureth-7* dan *cetearyl alcohol* & *cetearyl glucoside* yang disimpan dalam alat climatic chamber pada suhu 40^{o}C ± 2^{o}C / RH 75% ± 5% selama 30 hari. Pengamatan stabilitas fisika dilakukan pada hari ke-0, 8 dan 30. Data hasil pengamatan stabilitas fisika sediaan krim selama waktu penyimpanan yang meliputi organoleptis, viskositas, sifat alir, tipe emulsi, berat jenis, daya sebar, pH dan ukuran droplet dianalisis dengan one-way ANOVA (α=0,05). Hasil penelitian menunjukkan bahwa sediaan krim Formula I tidak stabil dalam hal viskositas, berat jenis, organoleptis dan pH, Formula II tidak stabil dalam hal viskositas, berat jenis, organoleptis, daya sebar, sedangkan Formula III menunjukkan ketidakstabilan dalam hal berat jenis, viskositas, organoleptis, daya sebar dan pH. Sedian Formula I, II dan III menunjukkan perbedaan karakteristik fisika yang bermakna dalam viskositas, berat jenis, daya sebar dan pH.

Kata kunci : stabilitas fisika, krim, kombinasi Hidrokuinon dan Tretinoin

FORMULATIONS AND PHYSICAL STABILITY AND pH CREAM WHITENING AGENTS Of 4% HIDROQUINONE AND 4% HIDROQUINONE-0,1% TRETINOIN COMBINATION WITH *POLYACRILAMIDE & C13-14 ISOPARAFFIN & LAURETH-7* DAN *CETEARYL ALCOHOL* & *CETEARYL GLUCOSIDE* AS EMULSIFYING AGENTS

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ABSTRACT

A research on physical stability of cream stock which contains cream base without active material (Formula I), 4% Hidrokuinon (Formula II) and combinations 4% Hidrokuinon and 0,1% Tretinoin (Formula III) with the emulsifying agents by using *polyacrilamide & c13-14 isoparaffin & laureth-7* dan *cetearyl alcohol* & *cetearyl glucoside* combinations which have been stored in climatic chamber at $40^oC \pm 2^oC$ / RH 75% ± 5% for 30 days, has been performed. Physical stability observation was performed on day 0, 8 and 30. Data of observing physical stability of cream during storage phase which included organoleptic, viscosity, flow properties, emulsion type, specific gravity, pH, spredibilitas and droplet size was analyzed with one-way ANOVA (α=0,05). Study result showed that Formula I cream unstable in viscosity, specific gravity, pH and organoleptics, Formula II was unstable in viscosity, specific gravity, organoleptics and spredibilitas while Formula III showed instability in specific gravity, viscosity, organoleptics, spredibilitas and pH. Formula I, II and III stocks showed significant physical characteristics differences in viscosity, specific gravity, spredibilitas and pH.

Keywords : physical stability, cream, Hidroquinone and Tretinoin combinations.