

OPTIMASI FORMULA EMULGEL “VCO” (*Virgin Coconut Oil*)

Geubrina Rasyeuki Meutuah Mahhell¹, Marchaban²

INTISARI

Latar Belakang: Minyak VCO banyak digunakan dalam bidang farmasi, obat tradisional maupun kosmetika. Sediaan emulgel adalah salah satu bentuk sediaan farmasi semipadat. Bagaimana membuat sediaan emulgel VCO dengan bahan penolong surfaktan, berapa nilai HLB optimum, serta konsentrasi gelling agent CMC-Na yang paling optimum

Tujuan Penelitian: Mencari formula emulgel VCO dengan menggunakan bahan penolong surfaktan (kombinasi Tween 80 – Span 80), serta konsentrasi gelling agent CMC-Na.

Metode Penelitian: Pertama dibuat berbagai formula emulsi VCO dengan emulgator kombinasi surfaktan Tween 80 dan Span 80, dicari nilai HLB optimumnya. Kedua pada formula yang optimum tersebut ditambahkan CMC-Na dengan kadar 0,5%, 1%, 1,5% dan 2%. Ditentukan secara empiris formula emulgelyang paling baik

Hasil Penelitian: Pertama diperoleh hasil emulsi yang paling stabil pada perbandingan Tween 80 – Span 80. Kedua setelah pada formula dengan HLB optimum ditambah CMC-Na pada berbagai kadar, diperoleh kadar CMC-Na paling optimum pada 1,5%.

Kesimpulan: Emulgel VCO, bentuk emulsinya paling baik dibuat pada nilai HLB 10,72. Emulgel VCO paling sesuai dibuat dengan CMC-Na 1,5% Formula emulgel VCO pada HLB dan konsentrasi CMC-Na mempunyai karakteristik viskositas setara dengan produk pembanging.

Kata kunci:

VCO, emulgel

¹Mahasiswa Farmasi Universitas Jenderal Achmad Yani Yogyakarta

²Dosen Farmasi Universitas Jenderal Achmad Yani Yogyakarta

OPTIMIZATION FORMULATION OF EMULGEL OF VCO

Geubrina Rasyeuki Meutuah Mahhell¹, Marchaban²

ABSTRACT

Background: VCO oil is widely used in the pharmaceutical, traditional medicine and cosmetic fields. Emulgel preparations are a form of semisolid pharmaceutical dosage form. How to make VCO emulgel preparations using surfactant as auxiliary ingredients, what is the optimum HLB value, and the most optimum concentration of gelling agent CMC-Na.

Objective: Searching a VCO emulgel formula using a surfactant (combination of Tween 80 – Span 80), as well as a concentration of CMC-Na gelling agent.

Method: First, various VCO emulsion formulas were made with an emulgator combining Tween 80 and Span 80 surfactants, seeking the optimum HLB value. Secondly, in the optimal formula, CMC-Na is added with levels of 0.5%, 1%, 1.5% and 2%. Empirically determined the best emulgel formula.

Results: Firstly, various VCO emulsion formulas were made using a combination of Tween 80 and Span 80 surfactants, and the optimum HLB value was sought. Secondly, to the optimum formula obtained, CMC-Na was added at various concentrations e.g. 0.5%, 1%, 1.5% and 2% respectively. Determined empirically the best emulgel formula obtained.

Conclusion: Emulgel of VCO, the emulsion form was best made at an HLB value of 10.72. The most suitable VCO emulgel was made using CMC-Na 1.5%. The VCO emulgel formula at that HLB value and CMC-Na concentration had viscosity characteristics equivalent to reference products.

Key words:
VCO, emulgel

¹Student Pharmacy Jenderal Achmad Yani University of Yogyakarta

²Lecturer Pharmacy Jenderal Achmad Yani University of Yogyakarta