

INTISARI

ANISA DYAH AYUNINGRUM, 2023. FORMULASI dan UJI MUTU FISIK SEDIAAN KRIM NICOTINAMIDA DENGAN VARIASI EMULGATOR ASAM STEARAT & TRIETANOLAMIN, KARYA TULIS ILMIAH, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA. Dibimbing oleh Apt. Dewi Ekowati, S.SI., M.Sc.

Nicotinamida adalah obat yang mengandung jenis vitamin B3 atau niacin. Penggunaan nicotinamida banyak digunakan untuk pengobatan jerawat di wajah yang menumpuk serta gangguan peradangan kulit lainnya. Tujuan penelitian ini adalah untuk mengetahui pengaruh emulgator asam stearat dan trietanolamin terhadap krim nicotinamida terhadap uji mutu fisik dan stabilitas krim.

Nicotinamida dengan variasi emulgator asam stearat dan trietanolamin dibuat sediaan krim dengan 3 formula yaitu FI konsentrasi asam stearat dan trietanolamin (17% : 1%), FII konsentrasi asam stearat dan trietanolamin (16% : 2%), FIII konsentrasi asam stearat dan trietanolamin (15% : 3%) Selanjutnya masing-masing formula diuji mutu fisik krim berupa uji organoleptis, uji homogenitas, uji viskositas, uji daya sebar, uji daya lekat, uji pH, uji tipe krim, dan uji stabilitas. Data dianalisis secara statistik menggunakan *Test of Homogeneity of Variances*. Kemudian dilanjut dengan uji (ANOVA). Jika data tersebut memiliki perbedaan kemudian dilakukan uji Duncan.

Hasil penelitian menunjukkan variasi emulgator asam stearat dan trietanolamin berpengaruh terhadap mutu fisik krim nicotinamida yang meliputi uji organoleptis, uji homogenitas, uji tipe krim, uji viskositas, uji daya sebar, uji daya lekat, uji pH, dan uji stabilitas. Dari hasil data uji mutu fisik krim menunjukkan seluruh formula memenuhi standar krim yang baik.

Kata kunci : Krim, nicotinamida, asam stearat, trietanolamin, uji mutu fisik krim.

ABSTRACT

ANISA, DYAH AYUNINGRUM, 2023. FORMULATION AND PHYSICAL QUALITY TEST NICOTINAMIDE CREAM WITH EMULSIFIERS VARIATION OF STEARIC ACID AND TRIETHANOLAMINE, SCIENTIFIC WRITING, FACULTY OF PHARMACY, UNIVERSITY SETIA BUDI, SURAKARTA. Supervised by Apt. Dewi Ekowati., S.Si., M.Sc.

Nicotinamide is a drug that contains a type of vitamin B3 or niacin. The use of nicotinamide is widely used for the treatment of accumulated acne on the face and other inflammatory skin disorders. The purpose of this study is to find out the effect of stearic acid and triethanolamine emulsifiers variations on nicotinamide cream on the physical quality test of the cream.

Nicotinamide with variations of emulsifier stearic acid and triethanolamine is made into cream preparations with 3 formulas, namely FI concentration of stearic acid and triethanolamine (17% : 1%), FII concentration of stearic acid and triethanolamine (16% : 2%), FIII concentration of stearic acid and triethanolamine (15% : 3%). Then each formula tested the physical quality of the cream in the form of organoleptic test, homogeneity test, viscosity test, spreadability test, adhesion test, *pH* test, cream type test, and stability test. Data were statistically analyzed using the Test of Homogeneity of Variances. Then proceed with the test (ANOVA). If the data has differences then Duncan's test is carried out.

The results showed that variations in emulsifying stearic acid and triethanolamine had an effect on the physical quality of nicotinamide cream which included organoleptic tests, homogeneity tests, cream type tests, viscosity tests, spreadability tests, adhesion tests, *pH* tests, and stability tests. From the results of the physical quality test data of the cream, it shows that all formulas meet good cream standards.

Keywords: Cream, nicotinamide, stearic acid, triethanolamine, test of physical quality of cream