

INTISARI

SUCI, FIRGIANA.S., 2020, PENETAPAN KADAR NIPAGIN DALAM SABUN WAJAH DENGAN METODE SPEKTROFOTOMETRI UV-Vis, KARYA TULIS ILMIAH, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA

Sabun wajah adalah kosmetik yang digunakan untuk membersihkan wajah dari debu dan kotoran setelah beraktifitas. Sabun wajah memiliki komposisi bahan pengawet salah satunya nipagin. Nipagin dalam kosmetik harus sesuai persyaratan karena dapat menyebabkan kanker. Tujuan penelitian untuk mengetahui kadar nipagin dalam sabun wajah yang dijual di swalayan di kecamatan Banjarsari, Surakarta.

Sampel yang diambil sebanyak 5 merek dengan kode A;B;C;D;E yang diuji secara uji kuantitatif menggunakan pereaksi deniges, KLT (Kromatografi Lapis Tipis) dan uji kuantitatif menggunakan metode Spektrofotometri UV – Vis yang dibaca pada panjang gelombang 258 nm. Preparasi sampel menggunakan cara ekstraksi cair – cair.

Uji kualitatif kandungan nipagin 4 sampel positif dan satu sampel negatif mengandung nipagin dan didapatkan kadar sampel A 0,0570 %; sampel B 0,0027 %; sampel C 0,1022% dan sampel D 0,0054%. Berdasarkan kadar sampel yang didapat tidak melebihi persyaratan yang ditetapkan dalam peraturan BPOM Nomor 23 tahun 2019 tentang batas maksimum penggunaan pengawet nipagin yaitu tidak lebih dari 0,4%.

Kata Kunci : Deniges, KLT ,Sabun Wajah, Nipagin,Spektrofotometri UV - Vis

ABSTRACT

SUCI, FIRGIANA.S., 2020, DETERMINATION OF NIPAGIN LEVELS IN A FACIAL SOAP WITH UV – Vis SPECTROTHOTOMETRY METHOD, SCIENTIFIC WRITING, FACULTY OF PHARMACEUTICALS, SETIA BUDI UNIVERSITY, SURAKARTA

A facial soap is a cosmetic which is used to cleanse the face from dust and dirt after having activites. A facial soap has preservative composition, one of which is nipagin. Nipagin in cosmetics must fullfil the requirements because it can causes cancer. This study aimed to determine the levels of nipagin in a facial soap sold at supermarkets in the Banjarsari sub-district supermarket, Surakarta.

Samples taken were 5 brands with code A; B; C; D; E were qualitative test method with deniges reagen TLC (thin layer chromatography) and Quantitative test was using UV – Vis Spectrophotometry which wasperformed at a wavelength of 258 nm. Liquid - liquid extraction was utilezed to prepare the sampels before futher stages.

Qualitative test results for nipagin 4 positive samples and 1 sampel negative contained nipaginand obtained in the sample level A was 0.0570%; sample B was 0.0027%; sample C was 0.1022% and sample D was 0.0054%. Based on the sample levels, those did not exceed the requirements stipulated at BPOM Regulation No. 23 year 2019 concerning the maximum use of nipagin preservatives, which is no more than 0.4%.

Keywords: Deniges, TLC, Nipagin, Facial Soap, UV-Vis Spectrophotometry