

**PENETAPAN KADAR ASAM SALISILAT PADA KRIM WAJAH
ANTI JERAWAT YANG BEREDAR DI KOTA BEKASI
DENGAN METODE SPEKTROFOTOMETRI UV-VIS**

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ABSTRAK

Asam salisilat digunakan dalam produk kosmetik sebagai zat anti jerawat. Berdasarkan keputusan Peraturan Badan Pengawas Obat dan Makanan Republik Indonesia Nomor 23 Tahun 2019, kadar asam salisilat diizinkan dalam kosmetik dengan syarat tidak lebih dari 2%. Tujuan penelitian ini untuk mengetahui kadar asam salisilat pada krim wajah anti jerawat yang beredar di Kota Bekasi. Metode penelitian dengan spektrofotometri UV-Vis. Analisis kualitatif dengan uji organoleptis dan uji warna menggunakan pereaksi FeCl_3 . Analisis kuantitatif asam salisilat diukur dengan spektrofotometer UV-Vis. Hasil penelitian panjang gelombang maksimum asam salisilat 235 nm. Kurva baku asam salisilat didapatkan persamaan regresi $Y = 0,0733x - 0,2104$ dengan nilai koefisien korelasi (r) = 0,995 dan koefisien determinasi (r^2) = 0,992. Rata - rata persen perolehan kembali asam salisilat 102,94%. Rata-rata kadar asam salisilat dalam sampel A adalah 1,42% , B 1,11%, C 1,49%, D 1,29%, dan E 1,26%. Seluruh kadar asam salisilat dalam sampel krim wajah anti jerawat memenuhi persyaratan yang telah ditetapkan oleh Badan Pengawas Obat dan Makanan (BPOM) yaitu $\leq 2\%$.

Kata kunci: Asam salisilat, krim wajah, anti jerawat, spektrofotometri UV-Vis.

ABSTRACT

Salicylic acid is used in cosmetic products as an anti-acne agent. Based on the decision of the Regulation of the Food and Drug Supervisory Agency of the Republic of Indonesia Number 23 of 2019, the level of salicylic acid is permitted in cosmetics on condition that it is not more than 2%. The purpose of this study was to determine the levels of salicylic acid in anti-acne face creams circulating in Bekasi City. The research method is UV-Vis spectrophotometry. Qualitative analysis with organoleptic test and color test using FeCl_3 reagent. Quantitative analysis of salicylic acid was measured by UV-Vis spectrophotometer. The results of the research were the maximum wavelength of salicylic acid was 235 nm. The standard curve of salicylic acid obtained the regression equation $Y = 0.0733x - 0.2104$ with the correlation coefficient (r) = 0.995 and the coefficient of determination (r^2) = 0.992. The average percent recovery of salicylic acid was 102.94%. The average levels of salicylic acid in sample A were 1.42%, B 1.11%, C 1.49%, D 1.29%, and E 1.26%. All levels of salicylic acid in the anti-acne face cream samples met the requirements set by the Food and Drug Supervisory Agency (BPOM), which was 2%.

Key words: Salicylic acid, face cream, anti-acne, UV-Vis spectrophotometry.