

ABSTRAK

NABILA TRI NURMAEMUNA, 2022, ANALISIS KADAR ASAM SALISILAT PADA KOSMETIK SEDIAAN GEL ANTI *ACNE* YANG BEREDAR DI PASARAN. KARYA TULIS ILMIAH, PROGRAM STUDI D-III ANALIS FARMASI DAN MAKANAN, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI. Dibimbing oleh Dian Marlina, S.Farm., M.Sc.,M.Si., Ph.D

Asam salisilat merupakan zat anti *acne* sekaligus keratolitik yang lazim diberikan secara topikal dan juga dapat digunakan sebagai antiseptik. Salah satu produk kosmetik yang mengandung asam salisilat yaitu gel anti *acne*. Penggunaan produk kosmetik gel anti *acne* digunakan untuk penyembuhan wajah berjerawat. Penelitian ini bertujuan untuk mengetahui kadar asam salisilat yang terkandung pada sampel gel anti *acne* sesuai persyaratan atau tidak.

Metode analisis yang digunakan pada penelitian ini yaitu Spektrofotometri UV-vis. Sampel dipreparasi dengan pelarut metanol dan diukur absorbansinya pada panjang gelombang dengan rentang waktu *operating time* tertentu. Pada penelitian ini dilakukan validasi metode analisi yang meliputi linearitas, akurasi, presisi, batas deteksi (LOD), dan batas kuantitasi (LOQ).

Hasil penelitian menunjukkan kadar asam salisilat pada sampel gel anti *acne* merk A sebesar 1,28%; sampel B sebesar 1,70%; sampel C sebesar 1,50%, sampel D sebesar 1,84% dan sampel E sebesar 2,14%. Dari hasil diatas dapat disimpulkan bahwa sampel E melebihi batas maksimum berdasarkan peraturan BPOM Nomor 23 tahun 2019 tentang persyaratan teknis bahan kosmetik bahwa batas maksimum penggunaan asam salisilat yaitu 2%.

Kata kunci: Asam salisilat, gel, spektrofotometri UV-Vis.

ABSTRACT

NABILA TRI NURMAEMUNA, 2022, ANALYSIS OF SALICYLIC ACID LEVELS IN COSMETICS OF ANTI ACNE GEL PRESENTATIONS ON THE MARKET. , SCIENTIFIC WRITING, DIPLOMA PHARMACY AND FOOD ANALYSIS, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY. Supervised by Dian Marlina, S.Farm., M.Sc.,M.Si., Ph.D

Salicylic acid is an anti-acne and keratolytic agent which is commonly given topically and can also be used as an antiseptic. One of the cosmetic products that contain salicylic acid is an anti-acne gel. The use of anti-acne gel cosmetic products is used for healing facial acne. This study aims to determine the level of salicylic acid contained in the anti-acne gel samples according to the requirements or not.

The analytical method used in this research is UV-vis spectrophotometry. The sample was prepared with methanol solvent and its absorbance was measured at a wavelength with a certain operating time. In this study, validation of analytical methods was carried out which included linearity, accuracy, precision, limit of detection (LOD), and limit of quantitation (LOQ).

The results showed that the level of salicylic acid in the anti-acne gel sample brand A was 1.28%; sample B by 1.70%; sample C is 1.50%, sample D is 1.84% and sample E is 2.14%. From the results above, it can be concluded that sample A exceeded the maximum level based on BPOM regulation Number 23 of 2019 concerning the technical requirements for cosmetic ingredients, which is no more than 2%.

Keywords: Salicylic acid, gels, UV-Vis spectrophotometry.