

INTISARI

Metilparaben merupakan turunan paraben yang banyak digunakan sebagai pengawet dalam berbagai sediaan kosmetik, diantaranya *facial foam*. Keputusan Kepala Badan POM RI No.HK.00.05.4.1745 tanggal 5 Mei 2003 mencantumkan batas maksimum kadar pengawet paraben dan turunannya, yaitu 0,4% untuk ester tunggal dan 0,8% untuk ester campuran. Tujuan penelitian ini adalah untuk mengetahui validitas metode HPLC dalam menetapkan kadar metilparaben dalam *facial foam*, berapa kadar metilparaben dalam sediaan *facial foam*, serta apakah kadar tersebut masih memenuhi persyaratan dari Keputusan Kepala Badan POM RI.

Penelitian ini termasuk penelitian non eksperimental deskriptif dan dilakukan dengan menetapkan kadar metilparaben dalam *facial foam* secara HPLC menggunakan detektor uv 257 nm, dengan kolom RP C₁₈, fase gerak campuran metanol dan air 4:6, serta kecepatan alir fase gerak 1,2 mL/menit. Parameter validitas metode yang dianalisis meliputi *accuracy*, *precission*, *linearity*, *sensitivity*, *selectivity/specificity*, LOD (*Limit of Detection*), dan LOQ (*Limit of Quantitation*).

Hasil penelitian menunjukkan bahwa validitas metode HPLC yang digunakan cukup baik dalam menetapkan kadar metilparaben dalam *facial foam* dan kadar metilparaben dalam ketiga sampel masih memenuhi persyaratan Keputusan Kepala Badan POM RI yaitu, 0,14 % b/b untuk sampel 1 dan 2, serta 0,10 % b/b untuk sampel 3.

ABSTRACT

Methylparaben is widely used as preservative in many cosmetic products, such as facial foam. The statement from Food and Drugs Supervisor of the Republic of Indonesia No.HK.00.05.4.1745 on May 5th, 2003 decided that the maximum concentration of paraben preservative and its derivatives 0.4 % to single ester, and 0.8 % to mix ester. There are three purposes of this research. The first purpose is to reveal the validity of HPLC method in determining the concentration of methylparaben in facial foam, the second purpose is to know the concentration of methylparaben in facial foam, and the last purpose is to reveal whether the concentration still fulfill the requirement from Food and Drugs Supervisor of the Republic of Indonesia.

This research is categorized as non experimental descriptive research. Determination of methylparaben in facial foam using HPLC and UV detector in 257 nm, with RP C₁₈ column, mobile phase water and methanol 4:6, and flow rate 1.2 mL/min. The result parameters are accuracy, precision, linearity, sensitivity, selectivity/specificity, LOD (Limit of Detection), and LOQ (Limit of Quantitation).

The result shows that the validity of HPLC method is good enough in determining the concentration of methylparaben in facial foam. The methylparaben concentration in facial foam is 0.14 % w/w for sample 1 and 2, and 0.10 % w/w for sample 3. These values still fulfill the requirement from Food and Drugs Supervisor of the Republic of Indonesia No.HK.00.05.4.1745 on May 5th, 2003 about cosmetic.

Keywords: methylparaben, facial foam, HPLC.