

## **Analisis Kandungan Hidrokuinon pada Sabun Pembersih Wajah Tidak Berizin BPOM yang Beredar di E-Commerce S**

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### **INTISARI**

**Latar Belakang:** *E-commerce* S merupakan suatu platform suat beli *online* yang memberi kemudahan dengan sistem jual beli tanpa harus bertatapan secara langsung. Namun sistem ini menimbulkan adanya potensi penjualan produk ilegal/tidak berizin BPOM. Berdasarkan temuan BPOM di tahun 2018 yang menemukan 126 miliar kosmetik yang setengahnya kosmetik pencerah, salah satunya sabun pembersih wajah. Sabun pembersih wajah ini sering ditambahkan dengan kandungan pencerah yang dilarang salah satunya yaitu hidrokuinon. Hidrokuinon merupakan agen aktif pencerah yang sangat efektif namun memiliki efek samping yang sangat berbahaya seperti dermatitis dan leukoderma kontak.

**Tujuan Penelitian :** Mengetahui apakah sabun pembersih wajah yang dijual *di e-commerce* S mengandung hidrokuinon serta mengetahui apakah hasil kadar memenuhi persyaratan BPOM.

**Metode Penelitian :** Analisis menggunakan 7 sampel yang diperoleh dari *e-commerce* S dengan kriteria tidak berizin BPOM, klaim memutihkan, memiliki harga <Rp.26.000, serta memiliki peminat dan ulasan berkisar 50-2000 pelanggan. Sampel dianalisis dengan menggunakan metode kualitatif dan kuantitatif spektrofotometri UV-Vis.

**Hasil Penelitian :** Berdasarkan hasil analisis kualitatif dan kuantitatif menunjukkan semua sampel positif mengandung hidrokuinon dengan perolehan kadar sebesar A=  $0,01502 \pm 0,0000645\%$ , B=  $0,004160 \pm 0,00001125\%$ , C=  $0,020748 \pm 0,0000505\%$ , D=  $0,36847 \pm 0,0004293\%$ , E=  $0,06118 \pm 0,00021\%$ , F=  $0,06696 \pm 0,000416\%$  dan G=  $0,038652 \pm 0,0001132\%$ .

**Kesimpulan :** Berdasarkan hasil analisis kualitatif dan kuantitatif semua sampel positif mengandung hidrokuinon. Namun perlu dipastikan kembali dengan metode yang lebih spesifik seperti HPLC.

**Kata kunci:** Hidrokuinon, sabun pembersih wajah, *e-commerce* S, spektrofotometri UV-Vis.

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## **Analysis of Hydroquinone Content in Unregistered BPOM Facial Cleansers Circulating on E-Commerce S**

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### **ABSTRACT**

**Background :** E-commerce S is an online buying platform that makes it easy to buy and sell without having to meet face to face. However, this system creates the potential for sales of illegal/unlicensed BPOM products. Based on BPOM findings in 2018 which found 126 billion cosmetics, half of which were brightening cosmetics, one of which was facial cleansing soap. This facial cleansing soap is often added with prohibited brightening ingredients, one of which is hydroquinone. Hydroquinone is a very effective lightening active agent but has very dangerous side effects such as dermatitis and contact leukoderma.

**Research Objective :** To determine whether facial cleansers sold on e-commerce platform S contain hydroquinone and whether the hydroquinone content meets BPOM requirements.

**Research Method :** The analysis used 7 samples obtained from e-commerce S with the criteria of not having a BPOM permit, whitening claims, having a price of <Rp. 26,000, and having interest and reviews ranging from 50-2000 customers. Samples were analyzed using qualitative and quantitative UV-Vis spectrophotometric methods.

**Research Results :** Based on the results of qualitative and quantitative analysis, it shows that all samples were positive for containing hydroquinone with a concentration of A=  $0,01502 \pm 0,0000645\%$ , B=  $0,004160 \pm 0,00001125\%$ , C=  $0,020748 \pm 0,0000505\%$ , D=  $0,36847 \pm 0,0004293\%$ , E=  $0,06118 \pm 0,00021\%$ , F=  $0,06696 \pm 0,000416\%$  dan G=  $0,038652 \pm 0,0001132\%$ .

**Conclusion :** Based on the results of qualitative and quantitative analysis, all samples were positive for containing hydroquinone. However, it needs to be confirmed again with a more specific method such as HPLC.

**Keywords :** Hydroquinone, facial cleansing soap, e-commerce S, UV-Vis spectrophotometry.

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