

INTISARI

KURNIYARTI, MARTIYA 2022. PENGARUH KONDISI PENYIMPANAN TERHADAP KADAR HIDROKUINON PADA KRIM PEMUTIH WAJAH YANG BEREDAR DI LOMBOK TENGAH

Krim pemutih merupakan kombinasi senyawa kimia yang berkhasiat dalam mengurangi hiperpigmentasi. Penggunaan krim dengan kandungan hidrokuinon lebih dari 2% dengan waktu yang lama dapat menyebabkan kanker kulit. Tujuan dilakukannya penelitian untuk mengetahui adanya kandungan hidrokuinon, berapa kadar hidrokuinon, dan pengaruh kondisi penyimpanan krim yang mengandung hidrokuinon.

Peneliti menggunakan 5 sampel krim pemutih wajah yang diambil dari wilayah Kabupaten Lombok Tengah. Pereaksi FeCl_3 , pereaksi benedict, metode KLT dan metode spektrofotometri UV-Vis digunakan untuk analisa kualitatif dan kuantitatif untuk mengetahui persentase kadar hidrokuinon pada sampel dengan pengaruh suhu.

Hasil analisis menunjukkan adanya kandungan hidrokuinon di 3 sampel krim pemutih wajah. Persentase kadar yang diperoleh pada kondisi perlakuan sampel dari tiga kali replikasi di suhu ruang sampel A sebesar 3,2%; sampel D sebesar 1%; sampel E sebesar 3,5%. Sampel di suhu ruang ber-AC sampel A sebesar 3,5%; sampel D sebesar 3,7%; sampel E sebesar 4,4%, dan sampel di suhu kulkas sampel A sebesar 4%; sampel D sebesar 4,1%; sampel E sebesar 5%. Kadar hidrokuinon dalam krim dengan kondisi penyimpanan krim tertutup di kulkas menghasilkan persentase kadar yang paling tinggi dibanding dengan penyimpanan di suhu ruang dan suhu ruang ber-AC, dapat disimpulkan bahwa tempat penyimpanan sangat berpengaruh terhadap kadar hidrokuinon dalam krim pemutih wajah.

Kata Kunci : Krim pemutih wajah, hidrokuinon, spektrofotometri uv vis

ABSTRACT

KURNIYARTI, MARTIYA 2021. EFFECT OF STORAGE CONDITIONS ON HYDROQUINONE LEVELS IN FACIAL WHITENING CREAM CIRCULATED IN CENTRAL LOMBOK

Whitening cream is a combination of chemical compounds that are efficacious in reducing hyperpigmentation. The use of creams with a hydroquinone content of more than 2% for a long time can cause skin cancer. The purpose of this study was to determine the presence of hydroquinone content, how much hydroquinone content, and the effect of storage conditions for cream containing hydroquinone.

Researchers used 5 samples of facial whitening cream taken from the Central Lombok Regency. FeCl_3 reagent, Benedict's reagent, TLC method and UV-Vis spectrophotometric method were used for qualitative and quantitative analysis to determine the percentage of hydroquinone content in the sample with the influence of temperature.

The results of the analysis showed the presence of hydroquinone in 3 samples of facial whitening cream. The percentage of concentration obtained in the treatment condition of the sample from three times of replication at room temperature of sample A was 3.2%; sample D by 1%; sample E of 3.5%. Samples in air-conditioned room temperature sample A of 3.5%; sample D by 3.7%; sample E is 4.4%, and sample at refrigerator temperature is sample A is 4%; sample D by 4.1%; sample E by 5%. Hydroquinone levels in cream with closed cream storage conditions in the refrigerator resulted in the highest percentage of levels compared to storage at room temperature and air-conditioned room temperature, it can be concluded that the storage area greatly affects the hydroquinone levels in facial whitening cream.

Keywords : Face whitening cream, hydroquinone, UV vis spectrophotometry