QUALITATIVE ANALYSIS OF HYDROQUINONE IN WHITENING CREAM FACES CIRCULATING ON THE LUMAJANG HIGHWAY WITH METHOD THIN LAYER CHROMATOGRAPHY (TLC)

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ABSTRACT

Background: Cosmetics are preparations used on the outside of the body, such as the epidermis, skin, hair, nails, lips or eyes which aim to increase attractiveness, change appearance and protect, but are not intended to treat or cure disease. Based on BPOM RI Regulation Number 17 of 2022, hydroquinone is prohibited in cosmetics, except for artificial nail preparations with strict limitations and use by professionals. Therefore, it is necessary to conduct research on the Hydroquinone content in branded Facial Whitening Cream products that are not BPOMregistered. **Purpose:** The purpose of this study was to analyze the presence or absence of Hydroquinone content in branded Facial Whitening Cream cosmetics without a BPOM label sold on Jalan Raya Lumajang using the Thin Layer Chromatography (TLC) method. **Research Method:** research on hydroquinone content was carried out using Thin Layer Chromatography (TLC) Based on (Number HK.03.1.23.08.11.07331 of 2011 concerning cosmetic analysis methods) the mobile phase was carried out using N-hexane: Acetone (3:2 v/v) while the pH test conducted based on (SNI 16-4954-1998) regarding skin whitening cream. **Research Results:** The results of the research conducted showed that the pH test of 6 samples of branded facial whitening cream without a BPOM label overall met the pH requirements of 4.5- 6.8. The results of the TLC test conducted showed that out of 6 samples, 3 samples were suspected of not meeting the requirements because they contained Hydroquinone compounds. This was known from the presence of the same spots from the Rf value of the sample and the Hydroquinone standard with a limit of < 0,05 and the color of the brown fluorescent spots on UV 254nm irradiation. **Conclusion:** From the results of the study, it can be concluded that branded facial whitening creams without BPOM labels sold in the Jalan Raya Lumajang area still contain facial whitening creams with certain brands that are not permitted for use on facial skin because they contain Hydroquinone compounds.

Key words: Hydroquinone, facial whitening cream, TLC