ABSTRACT

Linda Dwi Anggraini, Analysis of Retinoic Acid Content in Night Cream Circulating at Tanggulangin Market, Sidoarjo Using TLC Method. Supervised by Retno Ikayanti, S.Farm., M.Farm., Apt.

Retinoic acid is the acidic and active form of vitamin A (retinol) or also called tretinoin. Retinoic acid is a type of hard drug that can be purchased only with a doctor's prescription, but in reality there are still many cosmetic products that are sold freely on the market that contain retinoic acid. Retinoic acid includes medicinal chemicals that are prohibited from being included in cosmetic product ingredients. Because retinoic acid can cause dry skin, burning, stinging, erythema, teratogenic (defects in the fetus). The purpose of this study was to qualitatively analyze the presence or absence of retinoic acid in night creams circulating at Tanggulangin Market, Sidoarjo using thin layer chromatography (TLC). Analysis of retinoic acid content using the TLC method was carried out based on the 2011 Regulation of the Head of the Food and Drug Supervisory Agency of the Republic of Indonesia concerning cosmetic analysis methods. This analysis was carried out with the stationary phase in the form of a GF254 TLC plate using the mobile phase *n*-hexane: acetone (6:4) v/v. The results of the research conducted showed that of the 3 samples of night cream that had been analyzed, there were 2 samples of night cream that tested positive for containing retinoic acid. It is characterized by the presence of parallel spots on the retinoic acid standard and the presence of an Rf value that is the same as the retinoic acid standard, which is equal to 0.5. From the results of the research it can be concluded that of the 3 night creams that are not registered with BPOM which are circulating in the Tanggulangin Market, Sidoarjo, there are 2 night creams that contain retinoic acid.

Keywords: Retinoic Acid, Night Cream, TLC