

ABSTRACT

Xanthan gum is a hydrocolloid emulsifying agent that can be used in cosmetic formulations. Xanthan gum does not cause irritation reactions to the skin, so it is safe to be added on cosmetic formulations. This review aims to analyze the use of xanthan gum as an emulsifying agent in cosmetic formulations.

The method used in this study is narrative review. This method is based on the analysis of secondary data obtained from the Scopus, ScienceDirect, Wiley, and SpringerLink databases. The literature search on the database used keywords then selected based on inclusion and exclusion criteria. The articles that have been obtained are then analyzed and reviewed into a narrative review.

The results of the review showed that xanthan gum is used as an emulsifying agent in cosmetic formulations in the form of creams, nano emulsions, emulsions, SLN, and NLC. Xanthan gum reduces interface voltage, increases viscosity, and increases the stability of cosmetic emulsion formulations. The use of xanthan gum also provides good physicochemical properties in accordance with the requirements of cosmetic formulations for skin. The emulsion system shows good results characterized by the absence of creaming, coalescence, and phase separation. Xanthan gum penetrates the skin well and does not cause irritation reactions. Overall, xanthan gum has a high potential to be added as an emulsifying agent in cosmetic formulations due to its multifunctional and skin-safe characteristics.

Keywords: xanthan gum, cosmetic, emulsifying agent, skin