

FORMULASI SEDIAAN *BODY BUTTER* BERBAHAN DASAR *VIRGIN COCONUT OIL* (VCO) DENGAN VARIASI PENAMBAHAN TRIETANOLAMIN (TEA) TERHADAP KESTABILAN EMULSI

Anindita Prabaswari
20/462205/PA/20177

INTISARI

Telah dilakukan penelitian mengenai formulasi *body butter* berbahan dasar *Virgin Coconut Oil* (VCO) dengan variasi penambahan trietanolamin (TEA) terhadap kestabilan emulsi. Tujuan penelitian ini adalah untuk membuat dan mengetahui karakteristik dari sediaan *body butter* berbahan dasar *Virgin Coconut Oil* dengan ekstrak minyak lemon, mempelajari pengaruh variasi penambahan Trietanolamin sebagai bahan pengemulsi terhadap kestabilan *body butter* melalui beberapa uji, serta untuk mengetahui aktivitas *body butter* berbahan dasar *Virgin Coconut Oil* dengan ekstrak minyak lemon terhadap aktivitas antioksidan.

Penelitian ini diawali dengan proses pengujian karakteristik terhadap *Virgin Coconut Oil*, dilanjutkan dengan pembuatan sediaan *body butter* tanpa penambahan TEA dan pembuatan sediaan *body butter* dengan penambahan TEA. Setelah itu dilakukan uji karakteristik yang meliputi uji organoleptik, homogenitas, nilai pH, ukuran droplet, daya sebar, daya serap, pemisahan fase, nilai *Sun Protection Factor* (SPF) dan aktivitas antioksidan.

Hasil penelitian menunjukkan bahwa produk *body butter* dengan penambahan TEA memiliki kestabilan yang lebih baik dibandingkan produk tanpa penambahan TEA dilihat dari uji karakteristiknya. Kedua produk juga menunjukkan aktivitas antioksidan yang sangat kuat dengan masing-masing nilai IC_{50} -nya adalah 8,00 ppm untuk formulasi 1 dan 0,1995 ppm untuk formulasi 2.

Kata kunci: antioksidan, *body butter*, trietanolamin, *virgin coconut oil*.

BODY BUTTER FORMULATION BASED ON VIRGIN COCONUT OIL (VCO) WITH VARIATIONS ADDED TRIETHANOLAMINE (TEA) FOR EMULSION STABILITY

Anindita Prabaswari
20/462205/PA/20177

ABSTRACT

Research has been carried out on body butter formulations made from Virgin Coconut Oil (VCO) with variations in the addition of triethanolamine (TEA) for emulsion stability. This research aims to make and determine the characteristics of body butter preparations made from Virgin Coconut Oil with lemon oil extract, study the effect of variations in the addition of Triethanolamine as an emulsifier on the stability of body butter through several tests, and to determine the activity of body butter made from Virgin Coconut Oil with lemon oil extract on antioxidant activity.

This research began with the process of testing the characteristics of Virgin Coconut Oil, followed by making body butter without the addition of TEA and making body butter with the addition of TEA. After that, characteristic tests were carried out which included organoleptic tests, homogeneity, pH value, droplet size, dispersion power, absorption capacity, phase separation, SPF value, and antioxidant activity.

The results of the research show that body butter products with the addition of TEA have better stability than products without the addition of TEA seen from the characteristic tests. Both products also show very strong antioxidant activity with their respective IC_{50} values being 8.00 ppm for formulation 1 and 0.1995 ppm for formulation 2.

Keywords: antioxidant, body butter, triethanolamine, virgin coconut oil.