

Abstract

The aim of this study was to develop head to toe baby wash and facial cleansing oil from Highland Plants' Extracts. From the literature reviews, avocado oil, *Celastrus paniculata* seed oil, perilla oil, highland rice bran oil, highland purple rice bran oil and chamomile extract which had several biological activities, were selected to study for the properties and incompatibility with solvents/ excipients. In the formulation development, the prototype head to toe baby wash No.9 showed the clear yellow appearance, fruity soft foam with no eye irritation, while the prototype facial cleansing oil No.24 showed clear yellow appearance. The prototype facial cleansing oil No.24 can remove the water-proof make-up and change to white emulsion liquid when expose to water resulting in the no residue of product or make-up on the facial skin. The prototype head to toe baby wash and facial cleansing oil not only showed no different of cleansing effect as in comparing to the commercial products in the performance test, but also the good stability throughout 3 months test and accelerated condition. In the eye irritation test, the prototype head to toe baby wash showed lower irritation and had pH control resulting in the no eye irritant effect of product. While, in the test of facial cleansing oil, all formulations including 5 commercial products showed no irritation with the irritation score of 0 and no reaction of hemorrhage, lysis and coagulation on blood vessels. The prototype head to toe baby wash No.9 and facial cleansing oil No.24 were selected for the volunteer satisfaction test in 30 volunteers who had normal and hypersensitivity skin. The 2 research products did not show the different satisfaction score among the volunteers in physical appearance, overall satisfaction, continuous demand and also the skin hydration test in comparing to the commercial products. Furthermore, the chemical cost of the prototype head to toe baby wash and facial cleansing oil No.24 were 10.29 and 58.66 baht per 100 gram of products, respectively