

CRITICAL PERCENTAGE'S PRICING OF 0.001N FORMAT ACID ADDITION IN TO CREAM

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ABSTRACT

This research conducted in order to recon the amount/level of format acid concentration which still has the capacity to be utilized as additional ingridient into the multi-purpose cream, without creating any instability in the cream. This research also conducted to recon the amount/ level of format acid concentration which starts the cream's instability, and then performed through 4 (four) groups of treatment with 4 (four) times repetition. Treatment on Group A performed without the format acid addition , Group B performed by adding 0.1ml of 0.001N acid format, Group C performed by adding 0.2ml of 0.001N acid format, Group D performed by adding 0.3ml of 0.001N acid format and Group E performed by adding 0.4ml of 0.001N acid format. This research commence by keeping the basic cream without acid format addition in storage for 7 (seven) days in room temperature under observation. The observation consist of organoleptic tests such as evaluations of color, odor, texture, pH evaluation and microscopic tests on daily basis. After the evaluation of the basic cream without acid format addition shows a stable result, the research continued by using accelerated testing method for 3 cycle (each cycle equals 12 hours with temperature of 48°C and 12 hours in with temperature of 8°C) with the same organoleptic observation (consist of evaluations of color, odor, texture, pH evaluation) and microscopic test on daily basis. An observation by means of spektrofotometer infrared (IR) was conducted at the end of the cycle.

This research utilizes statistical calculation with probit regression method by using organoleptic data result. The conclusion of basic cream without acid format addition which put in storage for 7 (seven) days is stable, and then by using accelerated testing method, each Group of experiment creates vary results at the end of the cycle. Group A (without acid format addition) has a stable result, Group B (with 0.1ml of 0.001N acid format addition) starting to creates instability of the cream while each of Group C, D, E, shows a total instability results of the cream which can be seen through the results of organoleptic test, microscopic test and spektrofotometer infrared (IR).

Keywords : Cream, Format Acid, cream instability, accelerated test