



The Effect Of Ingredient Quality On Final Formulation Stability

Quality control of raw material

Application

Cosmetics

Objective

Effect of the batch quality of raw material

Device

TURBISCAN® Classic

INTRODUCTION

The nature and the quality of a constituent in a formulation may have repercussions on its stability. The formulators need to test the stability of their emulsions, suspensions and foams with different types of raw materials. When dealing with natural products the difference in quality can be more noticeable when moving from one supplier to another.

In order to examine this, we have analysed, with the Turbiscan Classic, the effect on the stability of two cosmetic emulsions, of the introduction of Jojoba oil from different suppliers.

METHOD

Two kinds of emulsion (« Sport lotion » and « Sensitive lotion ») have been prepared with Jojoba oil from different suppliers:

- with oil noted 1
- with oil noted 2

Samples number	4
Analysis volume	6 ml
Temperature analysis	43°C
Duration analysis	24 hours

Two hours are needed to bring the samples to the required temperature (43°C). The curve after 2 hours of analysis is selected as a reference. The subsequent traces then show the changes in back scattered light intensity (% , ordinate axis) on the tube height (mm, abscises axis) as a function of time (the last curve is always displayed in red).

RESULTS

The profiles obtained show different kinds of backscattering variation :

- no important backscattering variation at the top of the samples prepared with oil 1, characteristic of no changes in this zone (Figure 1).
- a backscattering decrease at the top of the samples prepared with oil 2, characteristic of a clarification of the samples in this zone (Figure 2).