



Application

Cosmetics

Objective

Details various applications of Turbiscan for cosmetics products

Device

TURBISCAN® LAB



Development and control of cosmetics products

INTRODUCTION

The stability of cosmetic products is one of the key parameter for the good quality of the product and the satisfaction of the customers. Moreover, the large range of product forms in these fields (milk, cream, foam, etc.), their various end-use properties and storage conditions make the stability tests long and tedious. Finally, the important number of components in these products leads to a complex interpretation of the data obtained via classical analytical techniques.

APPLICATION 1: LONG TERM STABILITY ANALYSIS

1. Common method

The stability analyses of cosmetic products are done by visual observation of samples stored at low (+4°C), ambient and high (+35 to +50°C) temperatures during up to six months, depending on the temperature. The subjectivity of these tests, which highly depend on the operator, and their lack of traceability lead to tedious and sometimes poor quality results. Moreover, as it is necessary to wait all this time before releasing a new formulation to the production, the development times are far too long considering the importance of fashion for this market.

The stability tests are therefore subjective and constitute a long time process that is more and more incompatible with the requirements of the marketing.

2. Turbiscan® method

The Turbiscan **ags** is a fully automated ageing station, which enables to store samples at three different temperatures (from ambient to +60°C) and to perform analyses on its own (from the measurement to the data processing). The analysis is done via a Turbiscan LAB that identifies and quantifies instability phenomena. Once a correlation has been established between the Turbiscan® and the classical techniques, a warning level can be set in the software, detecting automatically the products that are not fulfilling the requirements. Detection of instability can be done in less than two weeks.

Using the Turbiscan **ags, the stability tests of cosmetic products are accelerated up to 15 times, enabling to increase the development capacity for new products and to improve their reliability. It is therefore possible to be closer to the market.**