

Studies on quality control of cosmetics using new types of formulating technology and materials

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Functional cosmetics make the best use of recent technical advancement in such field as formulating technology, new materials and biotechnology.

We want establish routine analysis for quality and crossing control.

In this study, a method has been developed for the simple and rapid analysis of anionic preservatives such as p-hydroxybenzoic acid esters, sodium dehydroacetic acid and sodium sorbic acid in cosmetic products by high performance liquid chromatography (HPLC) . These cosmetic products are foundation contain nylon fine powder, titanium dioxide fine power as a new materials, rinse in shampoo by new formulating technology and eye liner.

The present method consists of two steps ; firstly extraction and cleaning up and secondly, quantification by HPLC.

HPLC conditions ; Column, ODS silica gel column Mobile phase, ①0.002 M cetyltrimethylammonium chloride/0.05M NaH₂PO₄ · MeOH·CH₃N (50:35:15) (pH 5.2 with H₃PO₄) ② MeOH·H₂O (60:40)

The present method was applicable to the determination of anionic preservatives in commercial products without interference of other cosmetic ingredients.