

<原 著>

高速液体クロマトグラフィーによるチオグリコール酸塩、 酢酸 dl- α -トコフェロール、ヘキサクロロフェンおよび イソプロピルメチルフェノールの定量法 (香粧品の迅速分析法 第5報)

木嶋 敬二*, 斉藤 恵美子*, 渡辺 四男也**,
鈴木 助治**, 永山 富雄***, 小嶋 茂雄*

Determination of Thioglycolic Acid Salt, dl- α -Tocopherol Acetate, Hexachlorophene and Isopropylmethylphenol- in Cosmetics or Quasi-drugs by HPLC (Simple and Rapid Determination of Cosmetics of Quasi-drug (5))

Keiji KIJIMA*, Emiko SAITO*, Yooya WATANABE**
Sukeji SUZUKI**, Tomio NAGAYAMA*** and Sigeo KOJIMA*

Abstracts

The determination of Thioglycolic acid salt (1), dl- α -Tocopherol acetate (2), Hexachlorophene (3) and Isopropylmethylphenol (4) in cosmetics and quasi-drugs was performed by mainly reversed phase High Performance Liquid Chromatography (HPLC) under the most suitable conditions of individual chemicals. These method consists of two steps, firstly, extraction or dissolution methods and secondly, quantification by HPLC.

HPLC conditions; Column, ODS silica gel. Column Mobile phase, (1) 3.3 mM Pentane sulfonic acid sodium salt/H₂O: Acetonitrile: Phosphoric acid (960:40:1) (2) Methanol: Tetrahydrofurane (95:5) or Methanol (3) 0.2 M NaClO₄/80% Mthanol (4) Acetonitrile: H₂O (1:1).

The recoveries of the ingredients added to the products at levels of (1) 4.1 ~ 4.9% (2) 0.1 or 0.3% (3) 0.1% and (4) 0.1% were not less than 90% and not more than 110%. There was no variation among the data from different analysts.

Keywords: High performance liquid chromatography; thioglycolic acid salt; dl- α -tocopherol acetate; hexchlorophene; isopropylmethylphenol; cosmetic; quasi-drugs