

HPLC determination of Panthenol in cosmetic products

Test aim: the method allows the determination of panthenol in cosmetic products through liquid chromatography (HPLC UV-VIS Diode – Array Detector).

Procedure: the sample is dissolved in the mobile phase, made by phosphate buffer and methanol, filtered in vial and prepared for the column injection. A mother solution of suitable concentration in the mobile phase is arranged at the same time. From it, through continuous dilution in the mobile phase it is possible to obtain reference solutions with different concentrations to generate the titration curve. Also these solutions are filtered in vial and injected in HPLC.

Linearity: between 0.001 mg/ml and 0.120 mg/ml of panthenol.

Detection limit: 0.0016 g/100 g.

Instruments: HPLC - DAD

Method: MP-1263 R0 internal standard