



Moisture Determination in Shampoo

General

Cosmetic products are very often emulsions with a very high water content, which must be exactly determined. This requires precise sampling, weighing and administration of the substance. The samples are therefore preferentially administered with a syringe that is weighed.

The sample dissolves easily in methanol. From the chemical structure, no interference should be obtained, so a titration according to the standard procedure may be carried out.

Reagent

Titrant: HYDRANAL-Titrant 5
Working medium: 40 ml
HYDRANAL-Solvent

A one-component reagent can be used as well:

Titrant: HYDRANAL-Composite 5
Working medium: 40 ml methanol

Primary Settings

Method ID: Shampoo
Use oven: No
Auto start: Yes
Blank: No
Uncert. calc.: Yes
Reproducibility: 5.0%

Parameters

Stirring speed: 600 rpm
Max. bur. speed: 150%/min
Min. titr. time: 00:30 (min:s)
Max. titr. time: 00:05 (h:min)
Max. volume: 10 ml

Sample

Sample ID: Yes
Sample unit: g
Advised amount: 0.030 g
Uncertainty: 0.001 g
Sample factor: 1
Result unit: %
Number of digits: 6
Quality control: No

Procedure

The sample is administered with a plastic syringe with needle. Weigh by difference.

Sample amount: 0.03 g

Comments

Shampoo is very soluble in the solvent. No more than 5 measurements should be performed in the same solvent.

Results

Mean: 83.49 ±7.138% H₂O
(K=2, 5 replicates)
K: coverage factor