CHELAB

In vitro water resistance test for water-proof mascaras

Test aim: this test is used for water-proof claimed mascaras in order to assess their water resistance power.

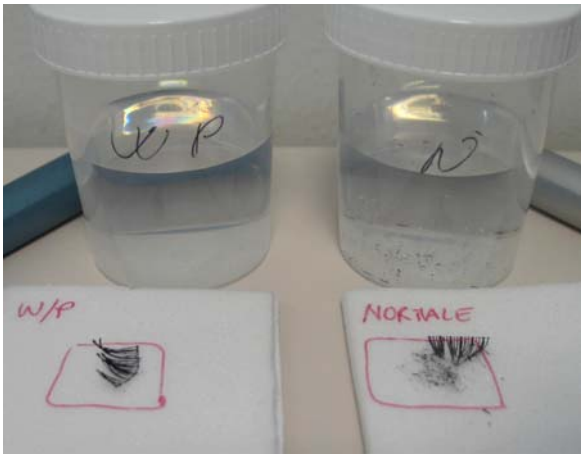
TEST PATTERN

1) PROCEDURE

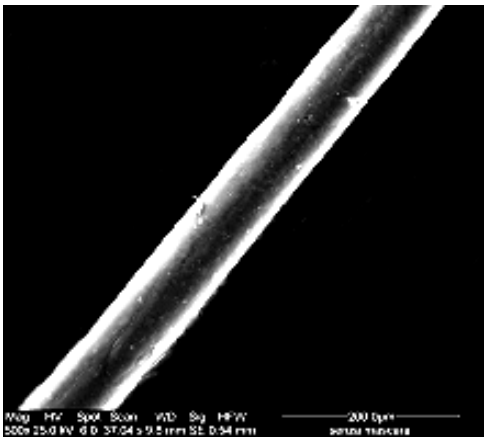
- On a sample of fake lashes made of natural hair, by means of an applicator spread a thin and even layer of mascara and then dry it for 15 minutes at 23 ± 2°C and 50 ± 5% RH.
- Put each sample into a container with tap water (T 23±2°C) and keep it there 10 minutes shaking constantly by means of a mechanical shaker supplied with digital control and set up at 100 RPM.
- Take the sample out of water and dry for 10 minutes at 23 ± 2°C and 50 ± 5% RH.
- Put the sample again into water for 10 minutes shaking constantly by means of a mechanical shaker supplied with digital control and set up at 100 RPM.
- Dry the lashes without wiping, on a sheet of white Styrofoam for 15 minutes at 23 ± 2°C and 50 ± 5% RH.

2) ASSESSMENT

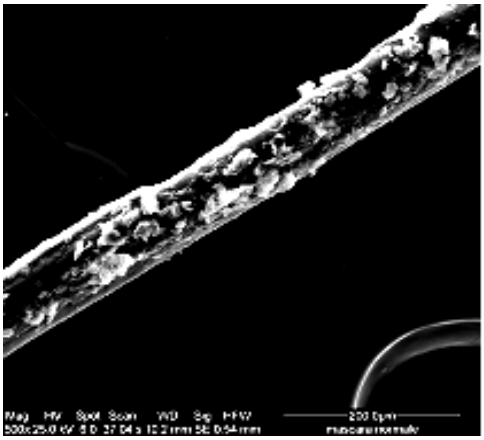
- Iconographic material and visual determination of the degree of colour loss of the cosmetic product both on Styrofoam and on the water containing the lashes (see the photo below)



- **Through S.E.M. (Scanning Electron Microscope) observation:** parts of lashes are placed on suitable stands and then metalized with gold in order to obtain the best microscopic resolution (see the photos below).



Not treated



Normal mascara

Water-proof mascara

Experimental procedures:

- Comparison with the blank sample (not treated sample)
- Comparison with proven efficacy market leaders
- Comparison with differently formulated products

Instruments:

- S.E.M.: Scanning Electron Microscope
- Canon Power Shot G6 digital camera
- Digital control mechanical shaker

Method: internal

Documentation: the final report focuses on the following steps: identification - results based upon visual assessment, digital camera photos and S.E.M. photos assessment - signature.