

Characterization methods for cosmetic and personal care products

Norlab offers a whole range of testing and analysis instruments for cosmetic and personal care products. Cosmetic products, often consisting of multiple components, should stay stable and uniformly mixed over long periods of time. The DataPhysics MultiScan MS 20 system is a measuring device for the automatic long-term dispersion stability analysis at different temperatures, which is fast, sensitive, non-destructive and can measure samples in their native concentration.

The DataPhysics spinning drop video tensiometers of the SVT series are special-purpose optical instruments for measuring extremely low interfacial tensions and rheological properties. This measuring technique offers unrivalled possibilities for the analysis of surfactant effectiveness in the development of greener cosmetics.

Surface tension measurements, using the DataPhysics OCA optical contour analysis system, can help to optimize foams by dynamic interfacial tension analysis, or to find new foaming agents.



Parameter	Method	Instrument
Dispersion stability	Analysis of the transmission and backscattering behaviour	MultiScan MS 20 dispersion stability analysis system
Foundation mousse properties	Dynamic contact angle measurement	Dynamic contact angle measuring devices and tensiometers
Green surfactant development	Interfacial rheology	Spinning drop video tensiometers
Hair properties	Optical contact angle measurement	Optical contact angle systems
Liquid hair product properties	Optical contact angle measurement	Optical contact angle systems
Particle dispersibility studies	Non-invasive NMR liquid relaxation technology	MagnoMeter XRS
Particle shape	Image analysis	BeVision D2 Bettersizer S3 Plus
Particle size, concentrated dispersions	Acoustic spectrometry	DT-1202 DT-100
Particle size, nanometer range	Dynamic light scattering	BeNano series
Particle size, powders	Laser diffraction	Bettersizer S3 Plus Bettersizer S3 Bettersizer 2600 Bettersizer ST
Solids concentration of suspensions	Non-invasive NMR liquid relaxation technology	MagnoMeter XRS
Wetted surface area of suspensions	Non-invasive NMR liquid relaxation technology	MagnoMeter XRS
Wettability of solid surfaces	Dynamic contact angle measurement	Dynamic contact angle measuring devices and tensiometers

Parameter	Method	Instrument
Wetting and coating of hair	Dynamic contact angle measurement	Dynamic contact angle measuring devices and tensiometers
Zeta potential, concentrated dispersions	Electroacoustic spectrometry	DT-1202 DT-310 DT-300