Characterization methods for pharmaceutical materials

Norlab offers a whole range of testing instruments for pharmaceuticals.

Here pharmaceutical products are regarded as materials with manufacturing processes within the context of the testing devices distributed by Norlab, rather than medical compounds with therapeutical characteristics. Pharmaceutical technologies produce pharmaceutical agents in their final delivery form, which means that the task is to characterize a powder, a dispersion or a tablet. Norlab offer testing instruments for dispersions (stability analysis), for powders (BET surface area, dynamic contact angle) and for tablets (pore structure, dissolution, disintegration).

Parameter	Method	Instrument
BET surface area and pore analysis	Gas adsorption	3P micro series 3P meso series 3P sync series 3P surface DX
Density, solids	Gas pycnometry	3P densi 100
Dispersion stability	Analysis of the transmission and backscattering behaviour	MultiScan MS 20 dispersion stability analysis system
Dissolution performance	USP apparatus 1, 2, 5 and 6, plus intrinsic and small volume dissolution	Water bath dissolution systems Bathless dissolution systems In-situ fiber optic UV 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
Pore volume and size distribution	Mercury intrusion porosimetry	Contract analysis Please ask for a quote
Purity check of liquids	Dynamic contact angle measurement	Dynamic contact angle measuring devices and tensiometers
Purity check of liquids	Interfacial rheology	Spinning drop video tensiometers

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Parameter	Method	Instrument
Purity check of liquids	Optical contact angle measurement	Optical contact angle systems
Solids concentration of suspensions	Non-invasive NMR liquid relaxation technology	MagnoMeter XRS
Water uptake and release	Dynamic vapor sorption (DVS)	3P graviSorb series
Wettability of solid surfaces	Dynamic contact angle measurement	Dynamic contact angle measuring devices and tensiometers
Wetted surface area of suspensions	Non-invasive NMR liquid relaxation technology	MagnoMeter XRS
Zeta potential, concentrated dispersions	Electroacoustic spectrometry	DT-1202 DT-310 DT-300