

Try the Alfatestlab difference!

Get in touch:

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Contract analysis
laboratory

 **ALFATEST**
Results you can trust *Lab*

30 years' expertise

At ALFATESTlab we are experts of particles and materials characterization. Our specialists benefit from a 30 years' experience in physical characterization techniques for powders and liquid dispersions. Our team also includes experts in biomolecules characterization. Whatever industry you belong to, our in-depth knowledge of the analytical techniques and our wide experience on any kind of material allow us to understand your analytical needs, retrieve the answers you are seeking for and deliver results you can trust.

particles & materials
characterization





Pharmaceutical powder

In vitro bioequivalence studies, thermal stability, polymorphism, hygroscopy studies, foreign particulate contamination studies, size & shape, chemical ID, flowability, specific surface area, SEM images, etc.



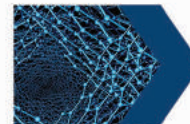
Pharmaceutical liquid & topical formulations

In vitro bioequivalence studies, thermal and physical stability, studies from stand-up to flowability at high shear, definition of the most representative analytical parameter for your process. High pressure homogenization, molecular weight, particle size etc.



Cosmetics & consumer products

Real stability, shelf-life studies, cloud point, liquids and powder flowability, high pressure homogenization, density, etc.



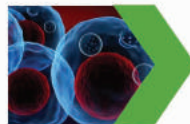
Solid materials

Specific surface area, porosity, density, clean check, hygroscopy, SEM images, elemental analysis, failure or surface defect analysis, thermal analysis.



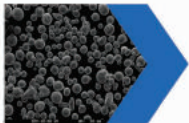
Metal powder for Additive manufacturing

Raw material quality control, powder flowability, powder recycling studies. Size, shape, surface area, flowability, SEM images, satellites and aggregates classification, internal porosity, tapped density, bulk density and skeletal density.



Exosomes & EV's characterization

Unique platform for detection, size, count, phenotype, specific biomarker colocalisation.



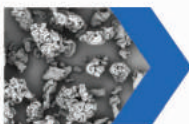
Particle characterization services

Micro and nanoparticle size, shape specific surface area, density, porosity, hygroscopy, chemical identification/speciation, flowability, thermal analysis, zeta potential, etc.



Rheology services (liquid, paste, powder)

Analysis, characterization projects, trainings, method development. Definition of the most representative rheological parameter for your process.



Microscopy services

SEM images, EDX spectroscopy, fibers image analysis, pores image analysis, particles image analysis, Automated Dynamic and Static image analysis, Morphologically Directed Raman Spectroscopy (MDRS).

we are experts in characterization processes

range of analytical services

Materials characterization services:

- Particle size
- Particle shape & transparency
- Surface area BET (multipoint and single point)
- Porosity (micro, meso and macro) / Pore analysis
- Density (real, bulk and apparent)
- Chemisorption
- Moisture (and any other liquid) sorption properties / hygroscopy analysis
- Powder rheology
- SEM high resolution images
- Chemical analysis: Raman & elemental analysis (EDX)
- Stability & Shelf life studies - Cloud point
- Particle size reduction
- Viscosity & Rheology of liquids and pastes
- Thermal analysis
- Sensorial analysis (e-nose)

Biopharmaceutical/Biochemistry services:

- Molecular weight
- Biomolecules size & aggregation
- Exosomes & EVs: size, count, concentration and phenotype
- Cell rupture
- Label-free biomolecular interactions (without purification)

For a complete list visit www.alfatestlab.com

unique analytical platform



contract analytical services

Experts of analytical techniques
Unique analytical platform
Accredited laboratory
State-of-the-art instrumentation
Analysis report in 15 days*
Express report in 2 days**

what we provide

- Characterization R&D project with orthogonal techniques
- Method development
- Method validation
- Method transfer
- Advanced & basic training on analytical techniques
- Single analysis

Our in-depth knowledge of analytical techniques and our extensive experience with all types of materials allow us to understand your analytical needs and provide the answers that you are seeking for through results you can trust. Our experts are available for research contracts as well as for single analysis, analytical method development, method validation and method transfer, industrial trouble-shooting, advanced training or workshops on analytical techniques present in our laboratory. Our team provides accurate and robust analytical methods for the characterization of any type of material. The work on an analytical method is conducted according to the guidelines and regulatory reference requirements. The experimental design is first shared with the customer in order to meet his requirements as well as specific corporate quality requirements. At the end of the project our experts issue a report including results of all the tests and analysis performed and the complete description of the optimized analytical method.

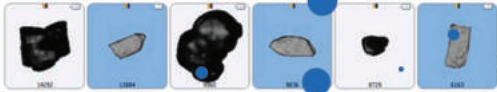
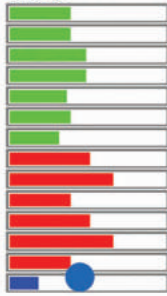
for any kind of material

Parameter Variability

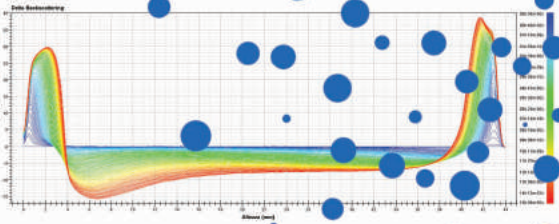
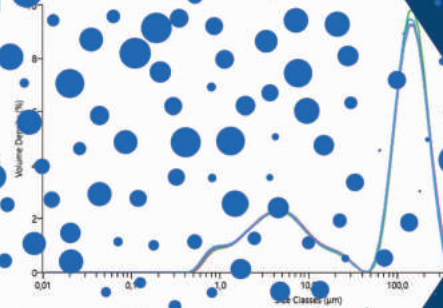
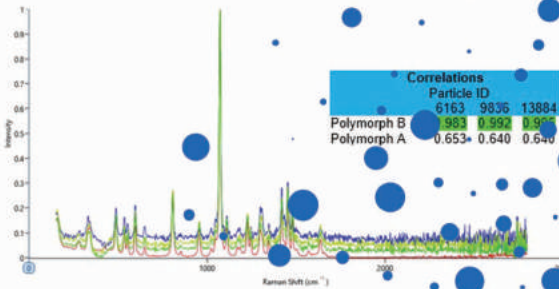
Cluster by:

- Area (µm²)
- CE Diameter (µm)
- Length (µm)
- Max. Distance (µm)
- Perimeter (µm)
- SE Volume (µm³)
- Width (µm)
- Aspect Ratio
- Circularity
- Convexity
- Elongation
- HS Circularity
- Solidity
- Intensity SD

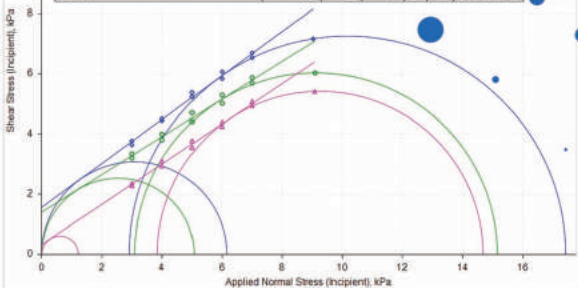
Variability:



Spectral Overlay



| Material and Batch | Cohesion, kPa | UVS, MPa | MPS, kPa | FF, % | APC, % | SD, g/ml |
|--------------------|---------------|----------|----------|-------|--------|-----------------|
| 10-0128 | 1.80 | 0.16 | 17.0 | 2.83 | 38.1 | 0.844 (±0.04%) |
| 10-0125 | 1.40 | 0.07 | 16.2 | 2.99 | 32.1 | 0.538 (±1.3%) |
| 10-0125 | 0.927 | 1.22 | 14.7 | 12.0 | 33.8 | 0.578 (±0.088%) |



Knowledge is the most relevant service we can include in your analytical contract.

Who knows your product better than you? No-one. But the right question is : which are the "numbers" that you should be using to efficiently define the characteristics of your product? Are those numbers the only ones available? Are they representative of your product's properties?

AlfastestLab not only provides "numbers" but the knowledge behind them to understand the meaning of the data and deliver a complete analytical support.

What we can do for you is help and look at your material from the right side, using the correct characterization techniques to obtain significative and relevant data.

Our knowledge is available to you for whatever service you may require, from a simple data to a complete method development report, or an advanced training on data interpretation.

Trainings on how to make sense of the analysis results or on the use of the instruments are part of our services. Ask us what we can do for you!

data interpretation & analytical support



ALFATESTlab is accredited according to the UNI CEI EN ISO / IEC 17025 standard by ACCREDIA, member of the Mutual Recognition Agreements EA, IAF and ILAC.

The international standard UNI CEI EN ISO / IEC 17025 defines the requirements that a laboratory must satisfy to demonstrate the technical competence of its staff and the availability of all technical resources, such as to guarantee accurate and reliable results for specific tests or analysis. The accredited laboratories are therefore able to offer the market guarantees on the reliability of their management and test methods. The reliability of test methods should not be intended as certified test results.

ISO / IEC 17025 requires the management system to comply with the principles of the ISO 9001 standard, further satisfying the technical requirements necessary to offer technically valid methods of specific tests.

Alfatestlab regularly participates to proficiency testing / interlaboratory circuits organized by recognized international organizations (for instance BAM) in order to verify and guarantee the reliability of its analytical results.

results you can trust

industries we serve



- Pharmaceutical
- Biopharmaceutical
- Cosmetics & Consumer products
- Food & Drinks
- Building materials
- Speciality chemicals
- Automotive/ Aerospace
- Petrochemical
- Energy
- Additive manufacturing
- Nanotechnology
- Microplastics
- Ceramics
- Inks, paints & Coatings
- Polymers & Plastics

Let's start...



Request a quote or contact us



Send us your samples



Retrieve the answers you are looking for

tell us about your analytical needs!

