



Characterization Services

HIGHLIGHTS

- FULL SERVICE LABORATORY
- DIVERSE CAPABILITIES
- COMPETITIVE PRICING
- FAST SAMPLE TURNAROUND
- PRECISE AND RELIABLE
- ISO 9001 CERTIFIED

AVEKA Group

*AVEKA Inc
AVEKA Manufacturing
Cresco Food Technologies
AVEKA Nutra Processing
AVEKA CCE Technologies*

AVEKA CHARACTERIZATION SERVICES

AVEKA provides testing services for in-house and external samples on every scale. We collaborate closely with our customers and combine analytical techniques to create a comprehensive characterization plan. A leader in particle processing technology, AVEKA has the experience and capabilities to provide precise and reliable characterization for your needs.

Particle size analyses

- Particles 3 nm to 2+ mm
- Particle size distribution (PSD)
- Sonic sieve
- Ro-Tap
- Coulter Counter

Imaging (particle shape analyses)

- Optical microscopy
- Scanning electron microscopy (SEM)
- Dynamic imaging analysis

Area and Density

- BET surface area
- Helium pycnometry

Formulation analyses

- High performance liquid chromatography (HPLC)
- Thermogravimetric analysis (TGA)
- Spectrophotometer
- Differential scanning calorimetry (DSC)
- Conductivity and pH

Additional analyses

- Zeta potential analysis (ZP)
- Rheological analysis
- Moisture and solids analysis (MSA)
- Karl Fisher

Characterization Services

You have questions. We have answers.

Encapsulated fragrance oils

What size is our product?

- Particle size distribution

Is the product dry enough?

- Moisture and solids analysis

Is the oil well encapsulated? Are the capsules cracked?

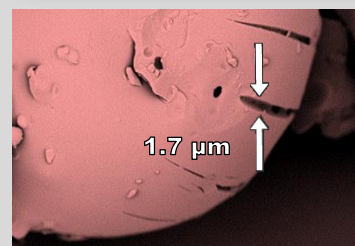
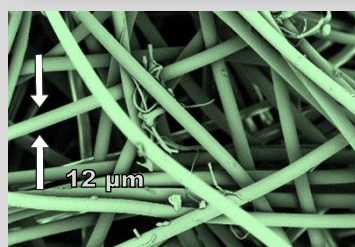
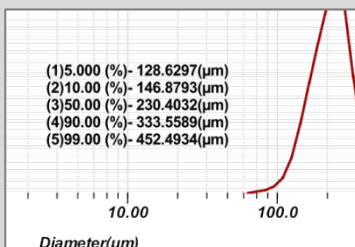
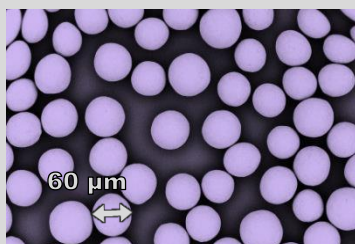
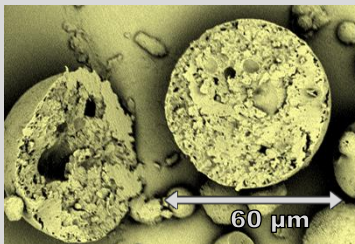
- Scanning electron microscopy

What is the fraction of oil to shell material? Is oil release temperature dependent?

- Thermogravimetric analysis

Are my particles spherical?

- Horiba Camsizer



Formulation of nutraceutical emulsion for spray drying

Is there variation between batches or contamination?

- High performance liquid chromatography

Is our emulsion stable?

- Zeta Potential

Are there issues with temperature changes post-production?

- Differential scanning calorimetry

Do we need to protect our material from oxygen and/or heat?

- Thermogravimetric analysis

Ceramic particle size reduction

What particle size and morphology exist after milling?

- Particle size distribution, scanning electron microscopy

Does the viscosity of the ceramic slurry meet specifications?

- Rheological analysis

Are my particles multi-shaped?

- Horiba Camsizer

Surface coat powder with silane

How much silane was added to our material?

- Thermogravimetric analysis

Is our final moisture content within specification?

- Karl Fisher

Dry, powdered food gelling agent

What does the powder look like dry vs. gelled?

- Optical and scanning electron microscopy

Does the powder behave properly when gelled?

- Rheological analysis

How does the gel behave with temperature change, cooking?

- Differential scanning calorimetry

The AVEKA Advantage

- Development of unique test methods to be highly specific to customers' needs
- Fast, 2-3 day sample turnaround
- Large resource network
- Ever-expanding technical capabilities

Visit www.aveka.com for more information and a Characterization Request Form.