



Pharmaceutical Ingredients Lab Services

Supporting your innovation journey



Bringing products to the market faster has never been easier with the right team as your partner. With emphasis on quality, stability, regulatory compliance, and a wide range of lab capabilities, Univar Solutions can help develop and support your product at any stage within the product life cycle.



Formulation development support:

- Chemical characterization and analysis
- Pre-formulation, formulation, and specification development for various dosage forms such as but not limited to:
 - Topicals/Semi-solids (Creams, Gels, Ointments)
 - Capsules (Powder-filled, Liquid-filled)
 - Liquids (Suspensions, Solutions, Sprays)
 - Solids (Tablets, Orally Disintegrating Tablets)
- Sample and prototype batch development
- Benchtop batch capabilities
- Scale-up technical support with machinery and processes
- Raw material recommendation and evaluation for enhanced performance
- Raw material sourcing and product testing to match benchmarks and regulations
- Physical product analysis such as:
 - pH
 - Viscosity/rheology
 - Appearance/color/odor
 - Hardness
 - Color analysis

Performance and application testing:

- QC method development and testing in accordance with USP methods such as:
 - Disintegration
 - Dissolution
 - Weight variation
- Particle size analysis
- Potency and assay
- Product packaging compatibility



Through our global network of solution centers, we also offer the following analytical services to support your product development and performance optimization needs.

Chemical analysis:

- CHN elemental analysis
- Differential Scanning Calorimetry (DSC)
- Flash Point Testing
- Gas Chromatography (Mass Spectrometry and Flame Ionization Detection)
- Gel Permeation Chromatography (GPC)
- High Performance Liquid Chromatography (HPLC)
- Inductively Coupled Plasma/Optical Emission Spectroscopy
- Infrared and Ultraviolet Spectroscopy (FTIR & UV/VIS)
- Liquid Chromatography with Mass Spectroscopy (Time of Flight LC-MS)
- Particle Size/Zeta-Potential
- Thermogravimetric Analysis (TGA)
- Trace Sulfur and Nitrogen content
- Water Content
- Refractive index
- And more

Product performance analysis:

- Hardness Testing
- Product Stability Testing
 - Room Temperature
 - Accelerated
 - Freeze/thaw
- Rheometry and Viscosity Characterization
- Texture Analysis
- And more

Other testing services available:

- Additive Identification
- Custom/Innovative Analytical Testing
- Forensic Failure Analysis
- Manufacturing Support
- Material/Contaminant Identification
- Product Performance Analysis/Modification
- API Degradation & Leachables Testing

Count on our team of chemists, scientists and technical leaders for support in responding to regulatory changes, new market opportunities and innovations to optimize and set your product formulations apart.



**For more information call us at + 1 281.982.9447
or visit univarsolutions.com/pharma**



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