



Visible Particulate: Foreign Particulate Identification (>100 µm)

- Multi-analytical approach to characterize/identify unknown particulates or material
- Source Determination/Root Cause Analysis/Reference Material Characterization
- Glass Delamination Screening
- Turnaround Time:

Standard: 5 samples = 5 business days

RUSH: 5 samples = 2 business days with preliminary results in 1 business day

Sub-Visible Particulate: Count, Size, and Characterization (<100 µm)

- USP <787>, <788>, and <789> Methods I & II – Release & Stability Testing
- Method development and verification for plasmid/vector/CGT/vaccine/lyophilized products
- Rinse studies for single-use systems and manufacturing components
- Characterization of sub-visible particulate using Automated Raman or SEM-EDS

MFI Information

- Comprehensive MFI study design tailored to your product and risk profile.
- Image-verified particle characterization with scientific review.
- Orthogonal confirmation for definitive root-cause determination.
- Application-specific testing for real-world stress conditions.

Container Closure Integrity Testing (CCIT)

- Deterministic, non-destructive methods for vials, pre-filled syringes, and flexible containers
- Laser Headspace Analysis (O₂ and CO₂ headspace detection)
- High Voltage Leak Detection (HVLD)
- Vacuum Decay
- Development, validation, and routine testing for stability and release
- Specialty with cell and gene therapies, and deep-cold and cryogenically-stored products

Extractables and Leachables (E&L)

- Vast experience with single-use systems and manufacturing materials and components
- High-resolution, accurate mass spectrometric instrumentation
- Compound identification and molecular formula generation for unknown compounds
- Mass analysis of proteins, peptides, MS/MS sequencing

Functional Suitability Testing and Residual Seal Force

- System-level functional suitability testing aligned to USP <382>
- Comprehensive assessment of container access, sealing, and dose delivery.
- Testing designed to simulate real-world use and worst-case conditions.
- Regulatory-ready data to support development, comparability, and lifecycle changes.



About Gateway Analytical

Gateway Analytical is a specialized analytical testing lab that supports Analytical, Quality Control, and Manufacturing teams with foreign particulate investigations, subvisible particulate testing, packaging development, and beyond.

Our Parent Company Aptar Pharma: Advancing Patient Safety, Together

We are proud of our partnerships. Aptar Pharma's expertise enriches Gateway Analytical; enhancing our drug delivery and analytical services. Together, we offer advanced solutions for healthcare challenges as worldwide leaders in pharmaceutical device design, development and manufacturing as well as manufacturing and distribution of pharmaceutical packaging components.

Commitment to Quality: Inspections, Accreditations, & Licensures

cGMP-Compliant Laboratory

FDA Registered & Inspected

Health Canada Inspected

EMA Inspected

21 CFR Parts 210 & 211

21 CFR part 820

ISO/IEC 17025:2017 Accredited

ISO 9001:2015 Accredited

DEA Drug Schedule II, III, IV, & V licensed

Recognized Leader in PDA Community

