

Capabilities

Polymers | Metals | Ceramics | Rubbers | Plastics

Chromatography

Gas Chromatography with Mass Spectrometry (GC-MS) or with Flame Ionization Detection (GC-FID)

- Headspace
- Phthalates Analysis
- Residual Monomer Analysis

Gel Permeation Chromatography

- Organic
- Aqueous
- Hexafluoroisopropanol
- High-Temperature (HT-GPC)

High Performance Liquid Chromatography (HPLC)

- Hindered Amine Light Stabilizers (HALS)
- Phenolic Antioxidants and UV Absorbers

Liquid Chromatography with Mass Spectrometry (LC-MS)

Physical

Aging and Exposure
Coefficient of Friction
Custom Test Fixtures
Density
Durometer
Flexural Strength
Impact
In vitro Aging
Rockwell Hardness
Shelf Life/Stability
Tensile

Spectroscopy

Energy Dispersive Spectroscopy (EDS)
Fourier Transform Infrared Spectroscopy (FTIR)
Inductively Coupled Plasma –Optical Emission Spectrometry (ICP-OES)

- 65 Element Scan, Semi-Quantitative
 - Single Element, Quantitative
- Nuclear Magnetic Resonance Spectroscopy (NMR)

- Carbon
- Proton

UV-Visible Spectroscopy (UV-VIS)

X-Ray Fluorescence Spectroscopy (XRF)

Our scientists excel at unraveling chemical and material challenges. We can assist with all stages of a product's life cycle including project concept, R&D, prototyping, manufacturing, and product failure analysis.

Thermal

Ash Content
Differential Scanning Calorimetry (DSC)
Dynamic Mechanical Analysis (DMA)
Time-Temperature Superposition Principle (tTSP)
Heat Capacity by Modulated DSC
Melt Flow Index (MFI)
Oxidative Induction Times (OIT)
Rheology
Thermogravimetric Analysis (TGA)

- Standard
- High Resolution

Wet Chemistry

Digestions
Dilute Solution Viscosity

- High Temperature
- Intrinsic
- Inherent
- Relative

Extractions

- Soxhlet

Titration

- Halide
- Karl Fischer
- Potentiometric
- End Group

We can test according to a multitude of industry standards including ASTM, CFR, ISO, and USP/NF. We can also customize and validate new methods to meet your specific needs.

Microscopy

Atomic Force Microscopy (AFM)
Hot Stage Microscopy
Keyence 3-D Digital Microscopy
Optical Birefringence
Optical Microscopy (OM)
Scanning Electron Microscopy (SEM)
Transmission Electron Microscopy (TEM)