**SERVICES and APPLICATIONS**

* Plastic, Bioplastic, Polymer, Elastomer, Rubber, Syntactic Foam and Composite Material Testing Laboratories
* Analytical Laboratory Services: Plastic Testing Laboratory
* Product De-formulation, Reverse Engineering, Composition Identification
* Plastic Additive Laboratory; BPA, Phthalates, Fillers, Slip, Antioxidants, Stearate, Stearamide, UV Block, Paraben
* Rheology, Blending, Mixing, and Extrusion
* Protective Packaging Development and Testing: Foams, Plank, Bags, Inflatable, Films, Barrier Films, Bubble Wrap
* Stretch Wrap, Cling Wrap, Shrink Wrap Film
* Residual Foaming and Blowing Agents in Foam Products, Warehousing, LEL and Aging Models
* Chemical Foaming Agent Performance Testing, Activation Temperature, Weight Loss, Loading Percentage
* Product Stability & Compatibility Testing
* New Product Development, Technology, Patents, and Patent Writing
* Small Scale Compounding and Custom Products
* Rigid Gas Permeable Contact Lens Products (RGP), Hydrogel Lenses, Transdermal Patch, and Coatings
* Cosmetics & Pharmaceuticals: Complete Analysis, Purity, Shelf life stability
* Medical Devices, Implants & Catheter Tubing
* Epoxy, Epoxies, Prepregs, Nanotubes, Laminates & Composites
* Contamination and Contaminant Identification
* Plastic Failure Analysis
* Litigation and Patent Infringement Support
* Custom Test Method Development, ASTM and ISO Test Methods, QC and QA programs
* Materials Analysis & Identification
* Consulting

**CAPABILITIES**

* **Rheology, Modeling, and Flow Analysis**
	+ Rheometrics Solids Analyzer (RSA)
	+ Dynamic Mechanical Analysis (DMA)-Viscoelastic Properties
	+ Stress Rheometer (SR5)-Melt Strength Rheology
	+ Capillary Rheometer
	+ Torque Rheometer
	+ Extrusion Plastometer, Melt Flow Rate
	+ Rheometry and Rheological Properties
	+ Brookfield Viscometer
	+ Intrinsic Viscosity, Viscosity Number
* **Thermal Analysis**
	+ Differential Scanning Calorimetry (DSC), Tg, Tm, Tc Transition
	+ Modulated Differential Scanning Calorimetry (MDSC)
	+ Thermal Gravimetric Analysis (TGA)
	+ Thermal Mechanical Analysis (TMA)
* **Chemical Analysis**
	+ Fourier Transform Infrared Spectroscopy (FTIR)
	+ Micro FTIR
	+ UV-Vis Spectroscopy
* **Physical Properties**
	+ Density and Specific Gravity
	+ Ash Content
	+ Shore Hardness
* **Chromatography**
	+ Gel Permeation Chromatography (GPC) with RI, MALS, DAD
	+ Gas (GC), Gas with Mass Spectroscopy (GCMS)
	+ Liquid (HPLC)
	+ Thin Layer (TLC)
* **Mechanical Analysis**
	+ Universal Testing Machine (UMT)
	+ Cycle Testing and Fatigue
	+ Custom Grips and Fixtures
	+ Tensile Testing and Elongation
	+ Tensile Strength and Modulus
	+ Compression Strength and Set
	+ Yield point and Youngs Modulus
	+ Break Point and Toughness
	+ Creep and Stress Relaxation
	+ 3 Point Bending Flexural Modulus
	+ Poisson’s Ratio
	+ Coefficient of Friction
	+ Puncture Resistance
	+ Stretch Wrap, Cling Peel
	+ Stress Relaxation and Creep Recovery
	+ Elastic Recovery and Permanent Deformation and Stress Retention of Stretch Wrap Film
	+ Tear Strength and Trouser Tear