

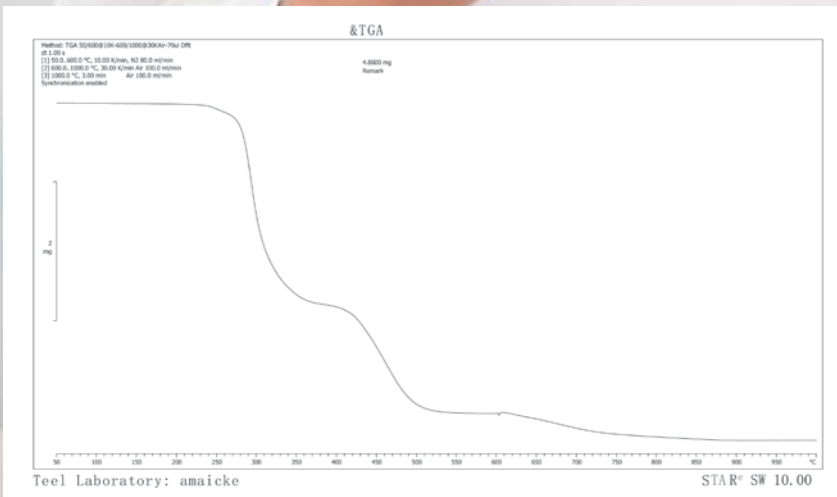
Success Story

Design Validation



A customer had designed a new injection molded part using recycled natural fibers to reinforce the part and provide the market with a “green” alternative. The natural fibers proved to be a challenge in the injection molding process. There were concerns the fibers were agglomerating during processing, and the fibers needed to be well dispersed in order to have the desired effect. The customer provided samples of the product to Teel Analytical Laboratories to verify that the natural fibers were dispersed evenly throughout the product.

Teel Analytical Laboratories quantified the amount of natural fibers present at various locations in the product. The customer used this information to validate that their processing conditions did not cause major agglomerations and met the product requirements. This gave the customer certainty their product would perform as designed.



Promotional Testing for New Customers

The laboratory is offering free testing¹ on two polymer powdered or pelleted resins for new customers. The testing performed includes²:

- ✓ DSC Evaluation
 - Glass transition temperature
 - Peak melting temperature
 - Percent crystallinity
 - Cure reaction onset temperature
 - The heat produced during a cure reaction (enthalpy)
- ✓ TGA Evaluation
 - Thermal degradation temperature
 - Percent composition of compounded materials
 - Percent ash
 - Percent inorganic filler
- ✓ FT-IR Evaluation
 - Determines the bulk identity of a material
 - Provides a “fingerprint” of the resin that can be used to perform routine QA/QC testing
 - Can be used as a basis of comparison against future “trouble” lots

This package amounts to \$1,650.00 in free testing and is a fantastic offer. This promotion offers an opportunity to evaluate us as a resource and to evaluate the information we can provide risk free.

List Prices

Differential Scanning Calorimetry (ASTM D3418).....	\$275/sample
Thermogravimetric Analysis (ASTM E1131).....	\$250/sample
Fourier Transform Infrared Spectroscopy (ASTM E1252)....	\$300/sample
Microscopy (Internal Procedure).....	\$200/sample
Percent Moisture (ASTM D7191).....	\$175/sample
Loss on Drying (ASTM E1868).....	\$90/sample
Shore Hardness, D-Scale (ASTM 2240).....	\$95/sample
Density (ASTM D792).....	\$90/sample
Bulk Density (ASTM D1895).....	\$75/sample
Particle Size Analysis (ASTM D1921).....	\$200/sample
Pipe Burst Testing (ASTM D1599).....	\$70/sample
High Performance Liquid Chromatography.....	Call for Pricing
Special Projects.....	Call for Pricing
Method Development.....	Call for Pricing
Consulting.....	Call for Pricing

Quality Results

Teel Analytical Laboratories is focused on providing quality analytical data and top notch customer service. We are an ISO 17025 Accredited Laboratory with only degreed scientists in the laboratory. We specialize in polymer analysis and work with polymer processors on a daily basis. Our personnel have experience in a variety of material testing areas, including: thermal analysis, contaminant identification, chemical extractions, and active ingredient testing.



Additional Services

Teel Analytical Laboratories offers additional services such as method development, including method validation and writing procedures. We also offer consulting services to evaluate and help improve tests you already perform in-house. Please contact us to add to or improve your in-house testing procedures.

To learn more about Teel Analytical Laboratories polymer testing services call us at 608-355-4520.

¹ The free offer is contingent on the completion and return of a short online customer survey. Eligibility for the offer is up to the sole discretion of Teel Analytical Laboratories.

² Not all tests are applicable to all samples.

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