



# DETROIT TESTING LABORATORY, INC.



## Chemical & Thermal Analysis

DTL performs Chemical and Thermal Analysis to define properties of a material, known in the industry as material characterization. The baseline information DTL provides our customers can be used as a future reference point for a standard material.

The information our laboratory derives from the test program can improve general quality assurance for our customers and/or provide data for product development research.

### Fourier Transform Infrared (FTIR) Spectrophotometry

#### Dynamic Mechanical Analysis (DMA)

Typically performed on solid materials.

- Rectangular Torsion
- Shear Modulus (G'G" TANΔ)

#### Rheological Analysis

Typically performed on polymer melts, paste & adhesives

- Cone and Plate
- Parallel Plate
- Viscosity Measurements

#### Thermal Analysis

Typically performed on polymers

- DSC
  - Cure
  - Crystallinity
  - Glass Transition Temperature
  - Melt Point
  - Oxidative Induction Time
- TGA
  - Ash/Filler Content
  - Compositional Analysis
  - Thermal Stability
- TMA
  - Coefficient of Linear Expansion (CLTE)
  - Glass Transition Temperature

For further information contact:

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