

# Chemical Testing

## for Polymers, Fluoropolymers and Plastics

Our extensive and quality testing capabilities are built on a 40-year foundation of expertise in the field of polymer science. With the latest in analytical technology and experienced professionals, we are able to provide routine and specialized testing services for industrial and commercial markets that include:

### FT-IR – Fourier Transform – Infra-Red Spectroscopic Analysis

- Identify solid polymer samples by spectral match to a library of over 22,000 materials
- A2LA Accredited for E1252
- Thermo Nicolet Nexus 470 FT-IR spectrometer with diamond and germanium ATR cells

### UV/Vis – Ultraviolet and Visible Wavelength Spectrometry

- Absorption profiles for spectral matching or percent transmission of solid and liquid samples
- Wet chemistry absorbance calibration to determine constituent concentration
- Cary 100 Spectrophotometer 190 – 900 nm photometric range

### SEM/EDAX – Scanning Electron Microscope with EDAX energy dispersive X-ray analysis

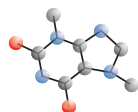
- Elemental analysis of the surface or an area of a sample
- Zeiss EVO40 with Ametek EDAX detector

### TGA/MS – ThermoGravimetric Analysis with Mass Spectrometer

- Evolved Gas Analysis
- TA SDT Q600 with Pfeiffer ThermoStar Mass Spectrometer for Evolved Gas Analysis
- Karl Fischer Moisture Content ASTM D6869
- Cosa Instruments VA-06 and CA-06 Moisture Analyzer

### GPC – Gel Permeation Chromatography

- Waters GPC running dichloromethane, chloroform, tetrahydrofuran, or dimethyl formamide as the carrier solvent with refractive index and UV variable wavelength detectors



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