

Polymer Analysis

DJK provides analysis and measurement services of polymeric materials such as resin materials, composites, rubbers, and elastomers.

<DJK Characteristics>

- ① Propose an efficient analysis menu specializing in polymer materials
- ② Enhancement of thermal characteristics and chromatographic analysis functions
- ③ Using the latest precision-controlled measuring instruments and analyzers

<Function of DJK>

- ① We are experienced in molecular weight measurement by GPC analysis.
And we provides highly reproducible analysis results.
- ② We are able to measure rheology such as dynamic viscoelasticity, molding fluidity, PVT, melt viscosity, and tension.
- ③ We are able to measure the thermal characteristics such as glass transition temperature, crystallization temperature, melting point, thermal conductivity, and specific heat.
- ④ One-Stop operation is performed from sample preparation to measurement.
- ⑤ We propose analytical methods that meet the objectives from the customer's perspective.

Molecular weight measurement and composition analysis	Thermal analysis and thermal characteristics	Viscoelastic/melt solution characteristics
<ul style="list-style-type: none">• GPC analysis and solution viscosity• End group/functional group analysis• Elemental analysis• TDS outgas analysis• Pyrolysis GC-MS spectrometry	<ul style="list-style-type: none">• DSC analysis (Tg, Tc, Tm, specific heat)• TG/DTA spectrometry (decomposition, vaporization)• Thermomechanical analysis (thermal expansion, softening)• Thermal conductivity• Softening and embrittlement temperatures	<ul style="list-style-type: none">• Dynamic viscoelasticity (DMA)• Dynamic shear viscoelasticity (rheometer)• Melt tension (capilograph)• Solution, melt viscosity, and MFR (MVR)• PVT measurement



GC-MS



Thermal conductivity



Capilograph



ICP-AES



Load deflection temperature and Vicat



Rotating rheometer