

ISO 17025 CERTIFIED

## Material Research Center

### The most reliable material characterization

Accurate material data is essential for successful simulation and manufacturing process development. Moldex3D Material Research Center has the best in class equipment to help customers obtain the most reliable and precise material data.

In addition, our laboratory staff is highly trained and experienced CAE simulation experts who can provide you with the best and custom testing services. The custom report will summarize with the raw material data and Moldex3D material parameters that fit your needs in CAE simulations.

#### What We Provide?

- Thermoplastic / Thermoset Material / Fabric Testing
- Custom and Flexible Testing Item
- Alternative Material Suggestion
- Data Fitting
- Custom Report



# Material characterization services for thermoplastic and thermoset

## Thermoplastic

		Fill, Pack, Cool	Fill, Pack, Cool, Warp	Fill, Pack, Cool, Warp (with Fiber)	Fill, Pack, Cool, Warp (with Viscoelasticity)
Rheology	Shear Viscosity(High Shear)	●	●	●	●
	Shear Viscosity(Low Shear)			●	●
	Fluid-Like Viscoelastic				●
Thermal	PVT	●	●	●	●
	Thermal Conductivity	●	●	●	●
	Heat Capacity	●	●	●	●
Mechanical	Tensile Modulus		●	●	●
	Poisson Ratio		●	●	●
	CTE		●	●	●
	Tensile Modulus (Anisotropic)			●	
	Poisson Ratio (Anisotropic)			●	
	CTE (Anisotropic)			●	
	In-Plane Shear Modulus			●	
	Solid-Like Viscoelastic				●

## Thermoset - Resin

		Fill, Cure	Fill, Cure, Warp, Post Mold Cure
Rheology	Reactive Viscosity	●	●
Kinetic	Curing Kinetics	●	●
	PVTC		●
Thermal	Thermal Conductivity		●
	Heat Capacity		●
Mechanical	Tensile Modulus		
	Poisson Ratio		●
	CTE		

## Fabric

		Fill, Cure
Fabric Property	Permeability	●
	Porosity	●

## List of Instruments

- DHR-3 (TA)
- MCR-502 (Anton Paar)
- Rheograph RG-25(Gottfert)
- MDR-A1 (U-CAN)
- DSC-8500 (Perkin Elmar)
- PVTC-A1 (U-CAN)
- FOAMAT 285 (Format)
- EASYPERM
- DMA-Q850 (TA)
- Instron 5966 (Instron)
- TMA-4000 (Perkin Elmar)
- PVT-6000 (GoTech)



Want to explore more?

Please contact us or visit: [www.moldex3d.com/en/contact/](http://www.moldex3d.com/en/contact/)

Feel free to fill up the contact form; we will get back to you soon!

**Moldex3D**



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