

Technical Data

Product Description

UV-stabilized. Good clarity, heat resistance, property retention and dimensional stability.

General

Material Status	• Commercial: Active
UL Yellow Card ¹	• E121562-220946
Search for UL Yellow Card	• SABIC • LEXAN™ Resin
Availability	• Latin America • North America
Additive	• UV Stabilizer
Features	• Good Dimensional Stability • High Clarity • High Heat Resistance
Uses	<ul style="list-style-type: none"> • Appliances • Automotive Exterior Parts • Automotive Interior Parts • Automotive Under the Hood • Construction Applications • Electrical/Electronic Applications • Electronic Displays • Household Goods • Lawn and Garden Equipment • Lenses • Lighting Applications • Medical/Healthcare Applications • Non-specific Food Applications • Outdoor Applications • Pharmaceuticals
Processing Method	• Injection Molding
Multi-Point Data	<ul style="list-style-type: none"> • Coefficient of Thermal Expansion vs. Temperature (ASTM E831) • Flexural DMA (ASTM D4065) • Shear DMA (ASTM D4065) • Specific Heat vs. Temperature (ASTM D3417) • Tensile Fatigue • Tensile Stress vs. Strain (ASTM D638) • Thermal Conductivity vs. Temperature (ASTM E1530) • Viscosity vs. Shear Rate (ASTM D3835)
Also Available In	• Asia Pacific

Physical	Nominal Value Unit	Test Method
Density / Specific Gravity	1.20 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	25 g/10 min	ASTM D1238
Molding Shrinkage - Flow (3.20 mm)	0.50 to 0.70 %	Internal Method
Mechanical	Nominal Value Unit	Test Method
Tensile Strength ³		ASTM D638
Yield	62.0 MPa	
Break	65.0 MPa	
Tensile Elongation ³ (Break)	110 %	ASTM D638
Flexural Modulus ⁴ (50.0 mm Span)	2300 MPa	ASTM D790
Flexural Strength ⁴ (Yield, 50.0 mm Span)	93.0 MPa	ASTM D790
Impact	Nominal Value Unit	Test Method
Notched Izod Impact (23°C)	640 J/m	ASTM D256
Instrumented Dart Impact 23°C, Energy at Peak	54.0 J	ASTM D3763
Tensile Impact Strength ⁵	378 kJ/m ²	ASTM D1822
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load 1.8 MPa, Unannealed, 6.40 mm	126 °C	ASTM D648
RTI Elec	130 °C	UL 746
RTI Imp	130 °C	UL 746
RTI Str	130 °C	UL 746
Flammability	Nominal Value Unit	Test Method
Flame Rating (1.2 mm)	V-2	UL 94



LEXAN™ Resin HF1130 - Americas

Polycarbonate

SABIC

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Optical	Nominal Value Unit	Test Method
Transmittance (2540 µm)	88.0 %	ASTM D1003
Haze (2540 µm)	1.00 %	ASTM D1003

Injection	Nominal Value Unit
Drying Temperature	120 °C
Drying Time	3.0 to 4.0 hr
Suggested Max Moisture	0.020 %
Suggested Shot Size	40 to 60 %
Rear Temperature	250 to 270 °C
Middle Temperature	260 to 280 °C
Front Temperature	270 to 295 °C
Nozzle Temperature	265 to 290 °C
Processing (Melt) Temp	270 to 295 °C
Mold Temperature	70 to 95 °C
Back Pressure	0.300 to 0.700 MPa
Screw Speed	40 to 70 rpm
Vent Depth	0.025 to 0.076 mm

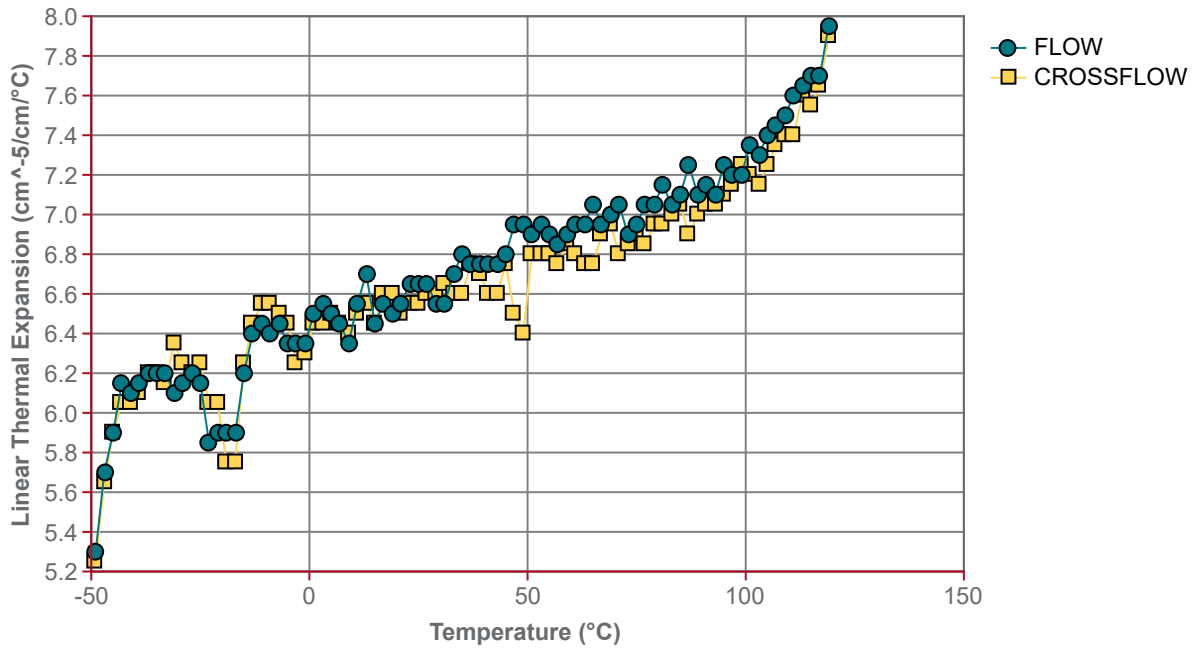
Injection Notes

Injection Molding Parameters

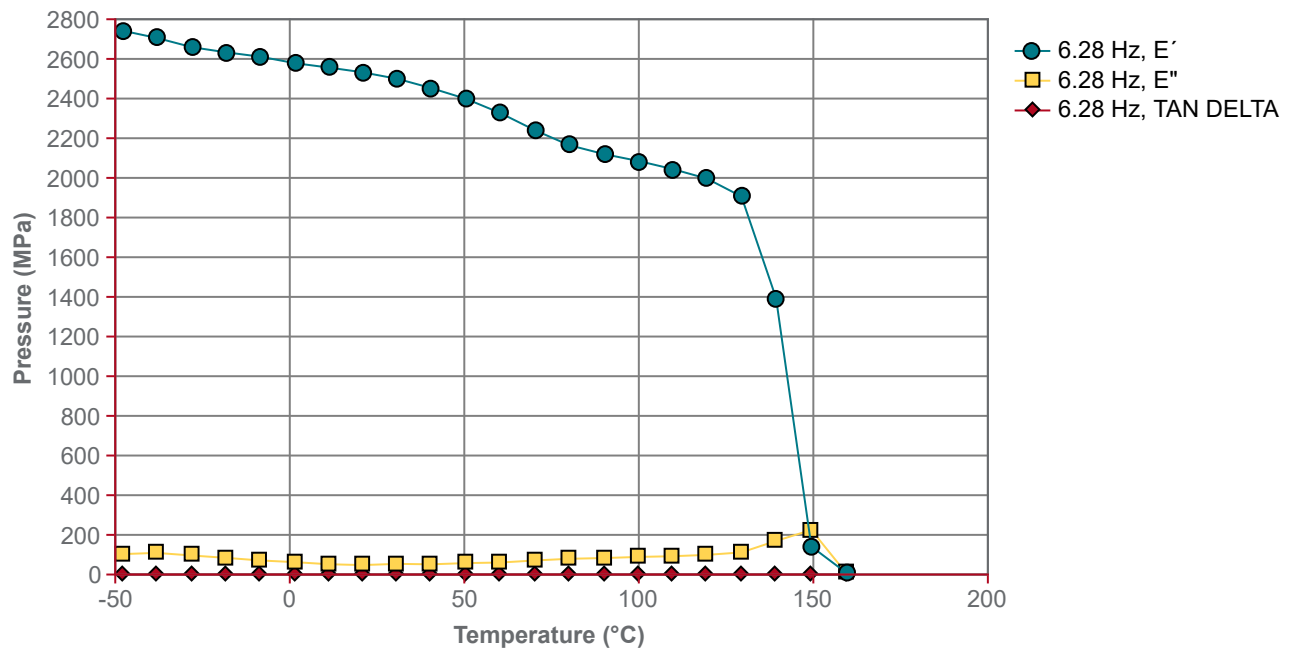
- Drying Time (Cumulative): 48 hrs



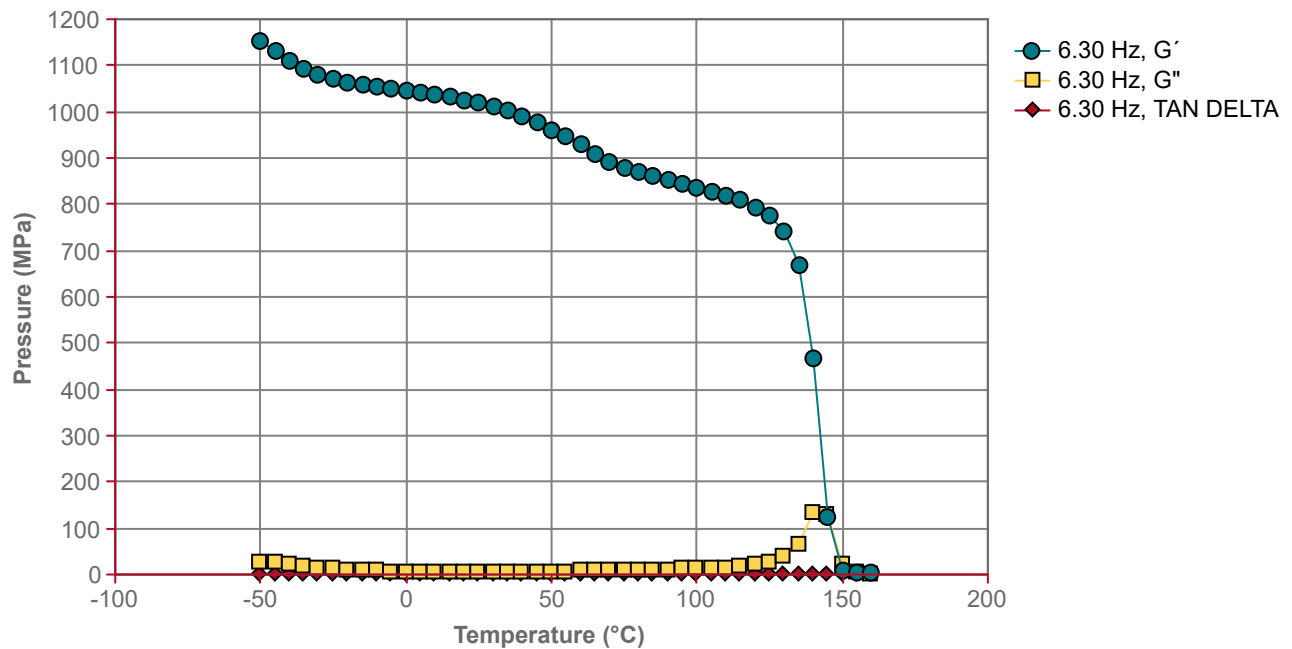
Coefficient of Thermal Expansion vs. Temperature (ASTM E831)



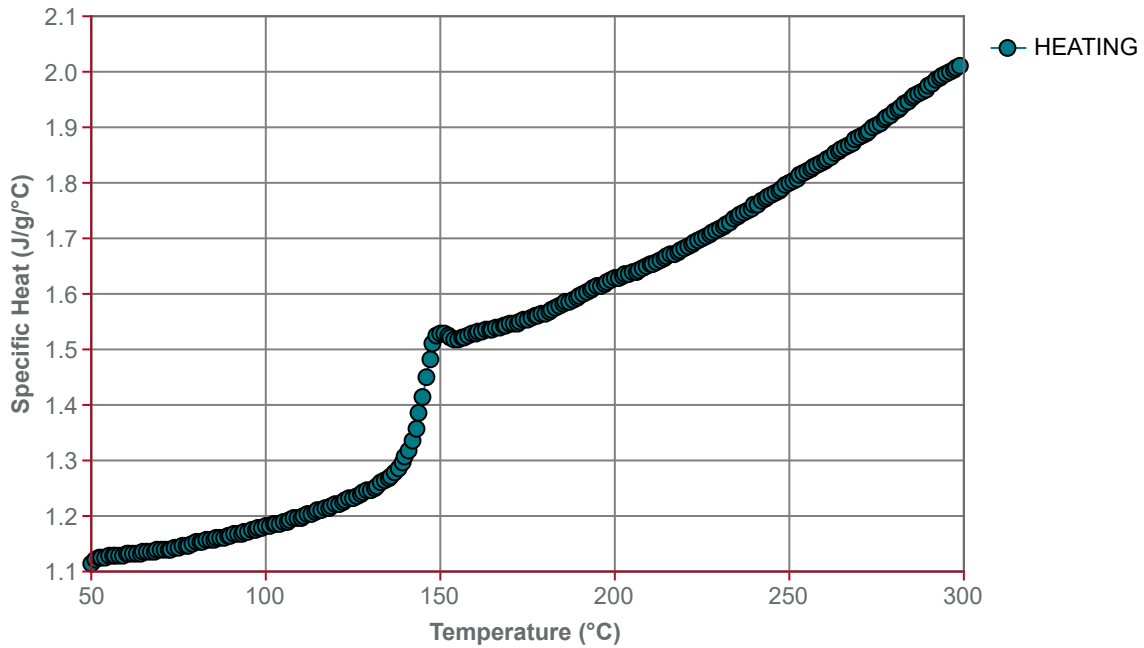
Flexural DMA (ASTM D4065)



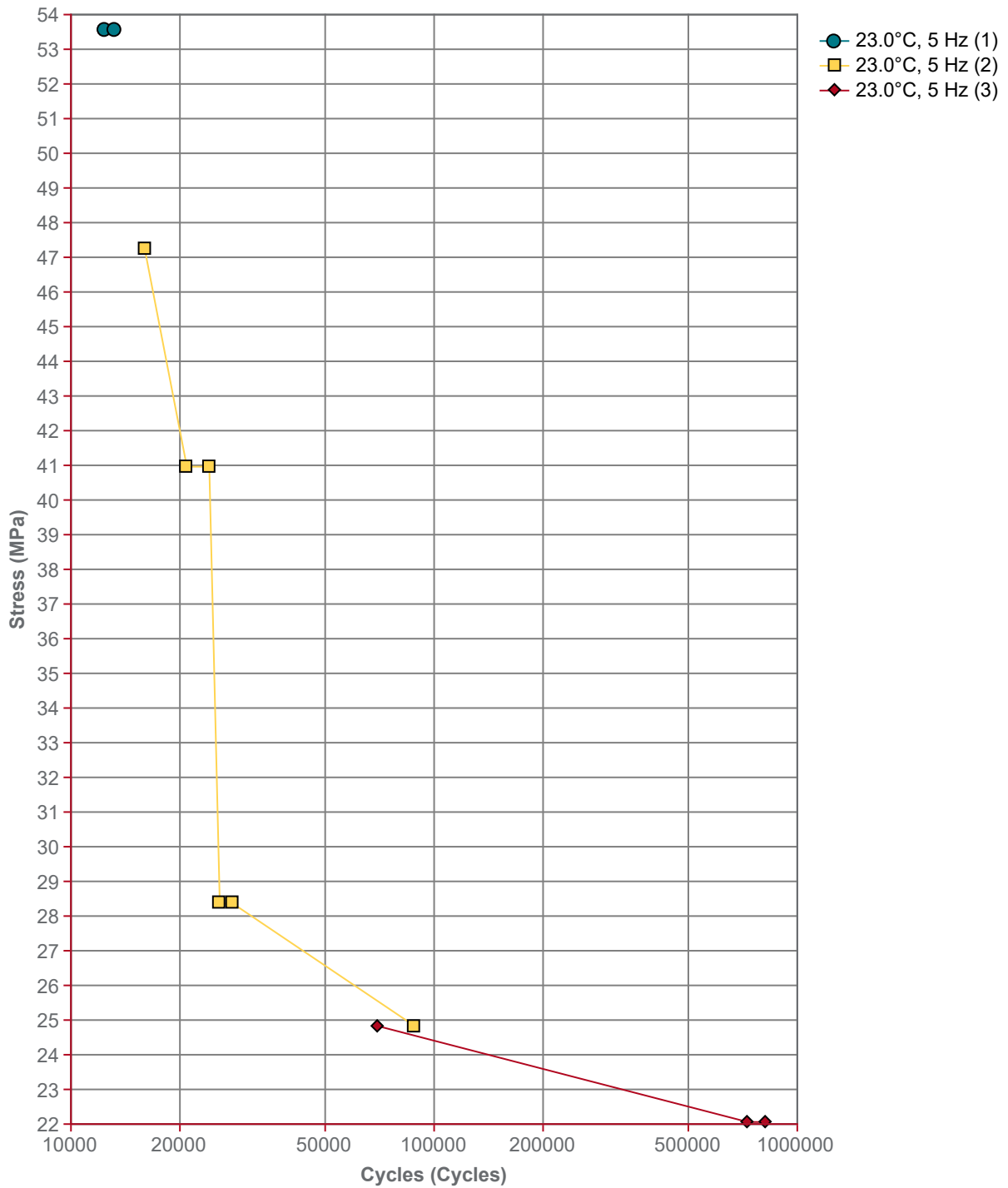
Shear DMA (ASTM D4065)



Specific Heat vs. Temperature (ASTM D3417)



Tensile Fatigue



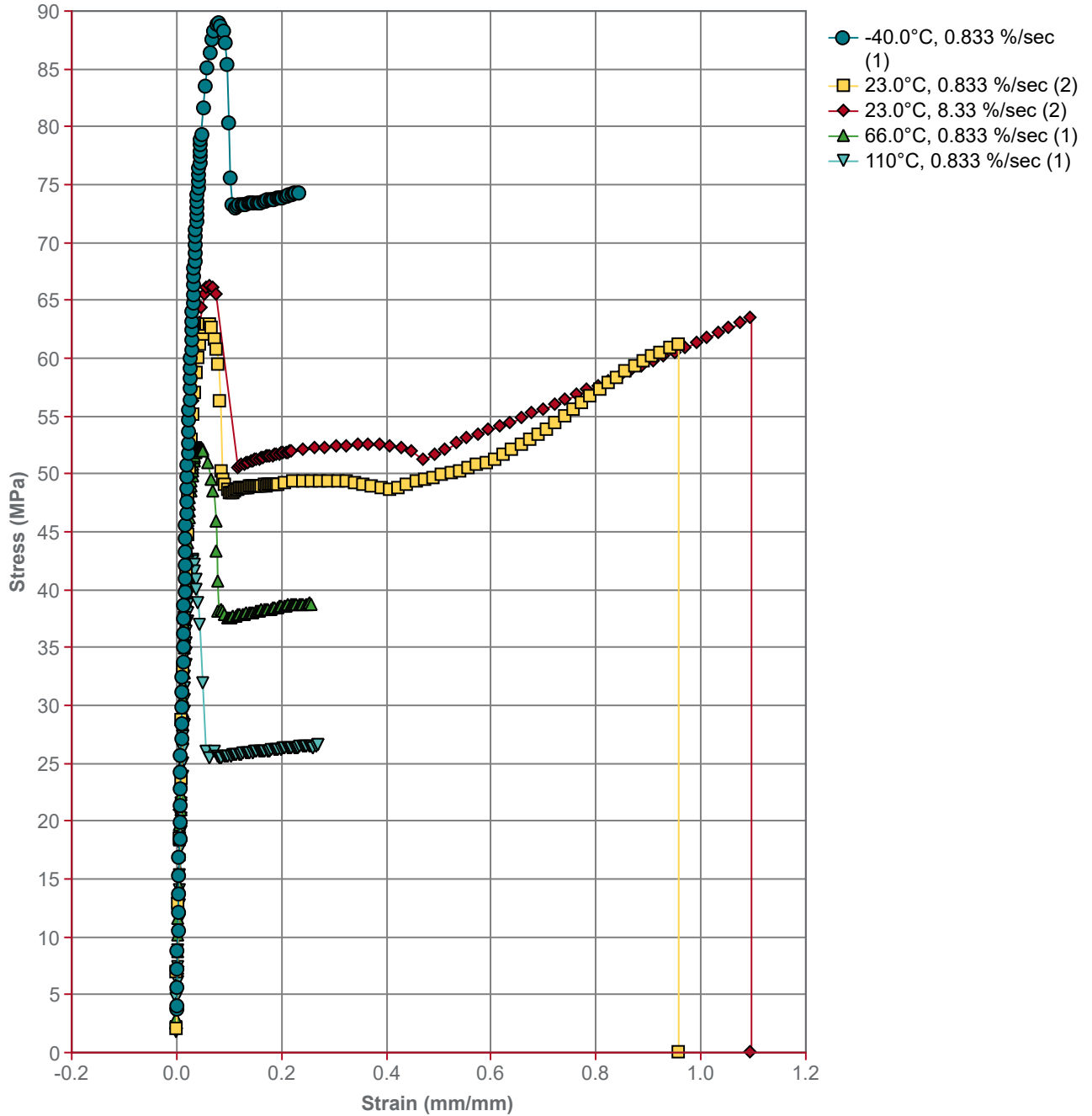
Data Notes

(1) - Series 1

(2) - Series 2



Tensile Stress vs. Strain (ASTM D638)

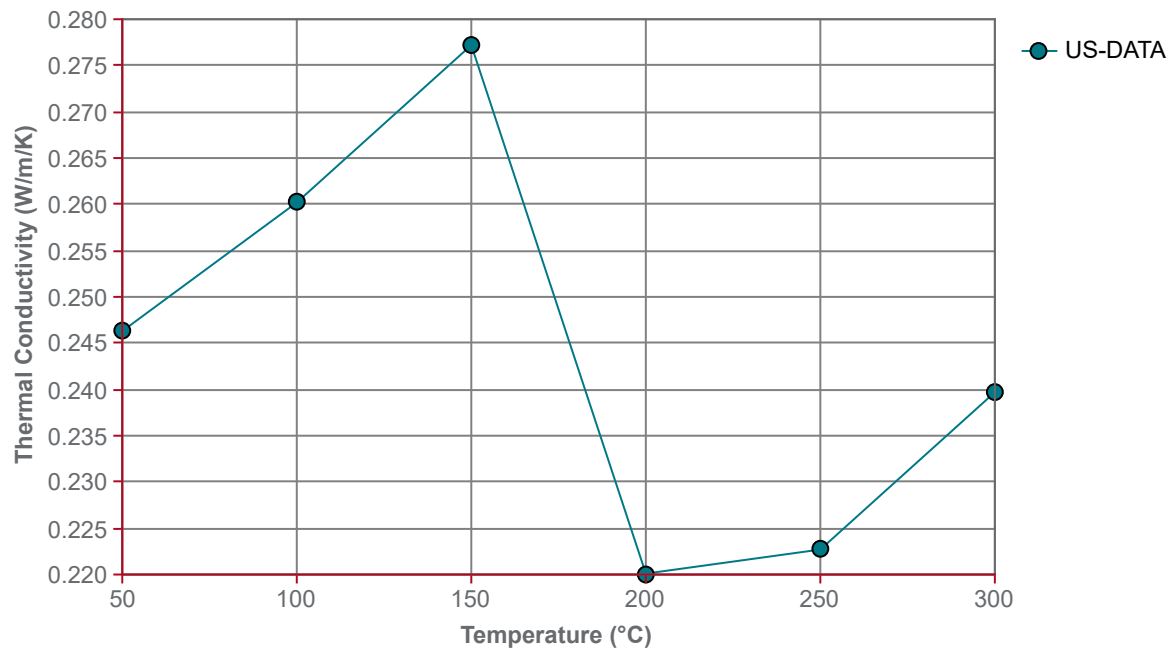


Data Notes

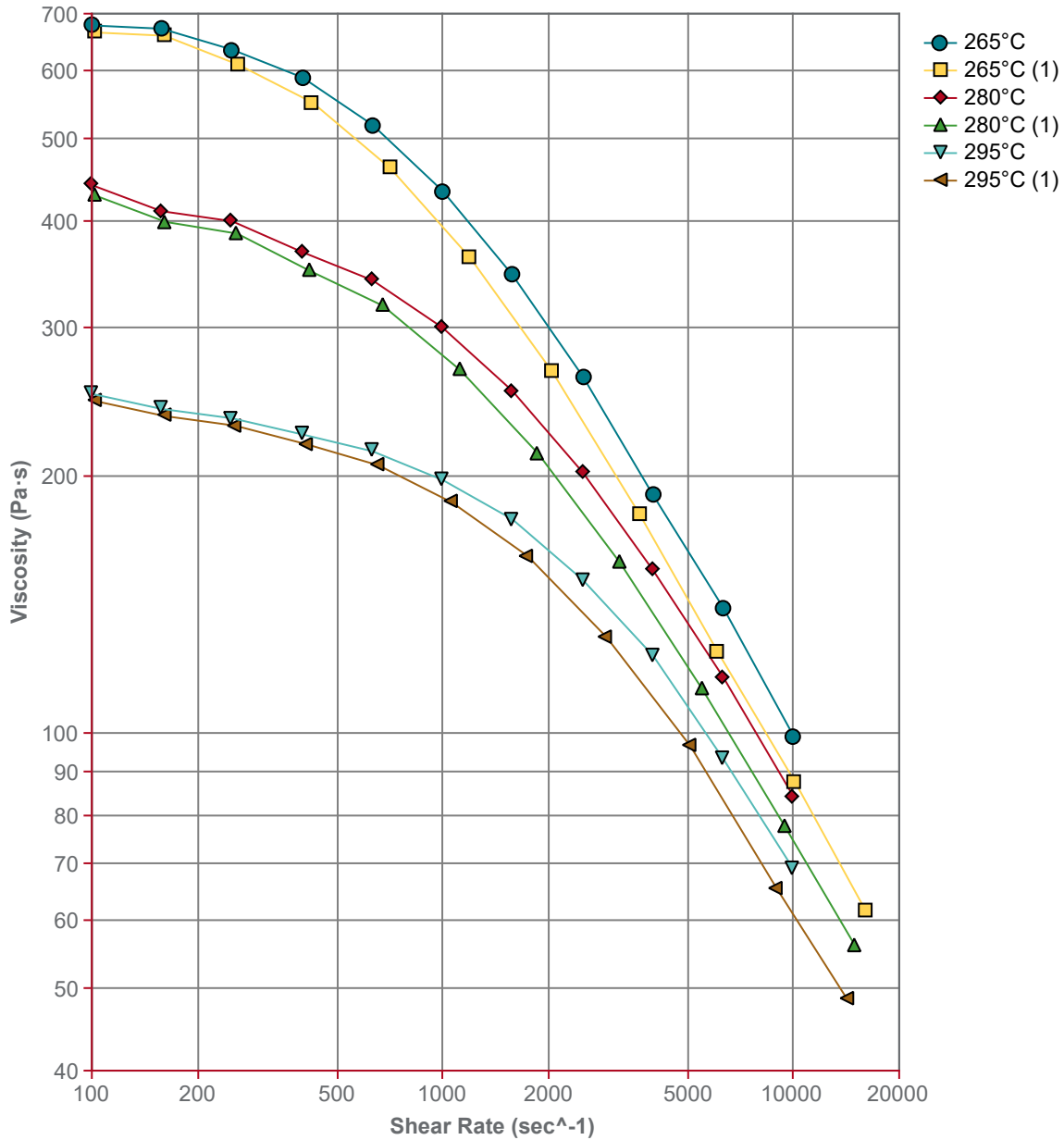
- (1) - STOPPED
- (2) - BREAK



Thermal Conductivity vs. Temperature (ASTM E1530)



Viscosity vs. Shear Rate (ASTM D3835)



Data Notes
(1) - Rab. Corrected Data



Notes

¹ A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

² Typical properties: these are not to be construed as specifications.

³ Type I, 50 mm/min

⁴ 1.3 mm/min

⁵ Type S



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Polycarbonate

SABIC

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Where to Buy

Supplier

SABIC

Web: <http://www.sabic.com/>

Distributor

Nexeo Plastics

Telephone: 833-446-3936

Web: <https://www.nexeoplastics.com/>

Availability: North America

