



Ixef[®] 1521

polyarylamide

Ixef 1521 is a 50% glass-fiber reinforced, flame retardant polyarylamide which exhibits high strength and stiffness, outstanding surface gloss, and excellent creep resistance.

- Natural: Ixef 1521/0008
- Black: Ixef 1521/9008

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • North America	• South America
Filler / Reinforcement	• Glass Fiber Reinforcement, 50% Filler by Weight		
Additive	• Flame Retardant		
Features	• Flame Retardant • Good Chemical Resistance • Good Creep Resistance • Good Dimensional Stability	• Good Processability • Good Surface Finish • High Heat Resistance • High Rigidity	• High Strength • Low to No Water Absorption
Uses	• Appliance Components • Appliances • Automotive Electronics • Business Equipment • Cams	• Electrical Housing • Electrical/Electronic Applications • Furniture • Gears • Industrial Applications	• Lawn and Garden Equipment • Machine/Mechanical Parts • Metal Replacement • Power/Other Tools
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical	Typical Value	Unit	Test Method
Density	1.75	g/cm ³	ISO 1183
Molding Shrinkage	0.10 to 0.30	%	Internal Method
Water Absorption (24 hr, 23°C)	0.15	%	ISO 62
Moisture Absorption (Equil, 65% RH)	1.3	%	Internal Method
Mechanical	Typical Value	Unit	Test Method
Tensile Modulus	20000	MPa	ISO 527-2
Tensile Stress (Break)	230	MPa	ISO 527-2
Tensile Strain (Break)	1.9	%	ISO 527-2
Flexural Modulus	20000	MPa	ISO 178
Flexural Strength (23°C)	340	MPa	ISO 178
Impact	Typical Value	Unit	Test Method
Notched Izod Impact	95.0	J/m	ASTM D256
Unnotched Izod Impact	700	J/m	ASTM D256
Thermal	Typical Value	Unit	Test Method
Heat Deflection Temperature 1.8 MPa, Unannealed	230	°C	ISO 75-2/A
CLTE - Flow	0.000017	cm/cm/°C	ISO 11359-2

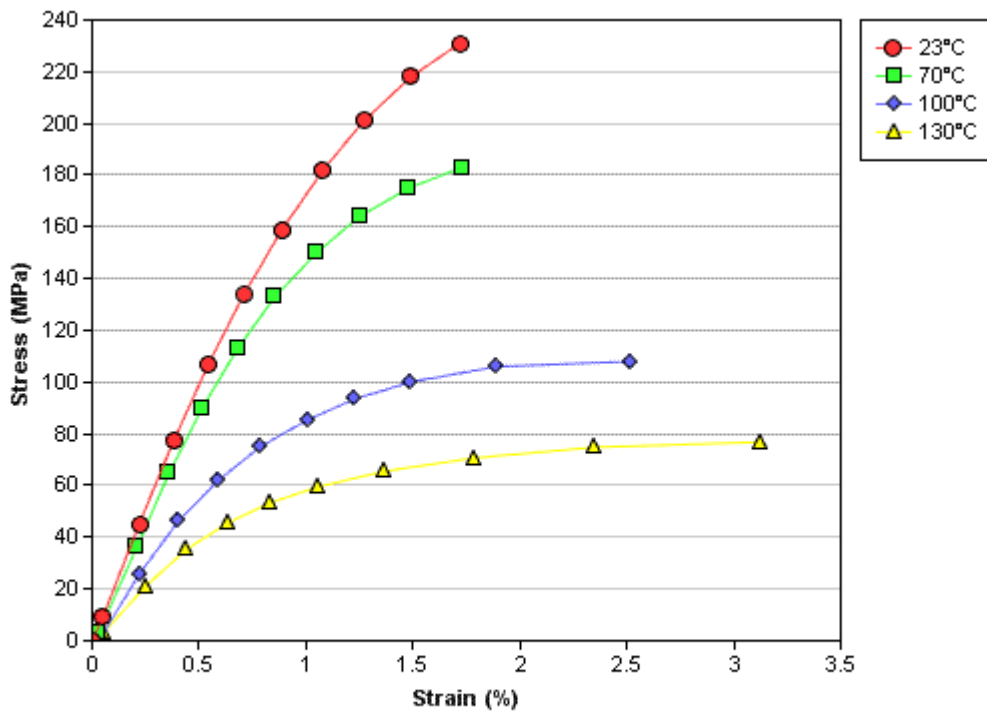
Electrical	Typical Value	Unit	Test Method
Volume Resistivity	> 1.0E+13	ohm-cm	IEC 60093
Dielectric Constant (110 Hz)	4.10		IEC 60250
Dissipation Factor (110 Hz)	0.012		IEC 60250
Comparative Tracking Index	400	V	IEC 60112
Electric Strength	29	kV/mm	IEC 60243-1
Flammability	Typical Value	Unit	Test Method
Flame Rating - UL ¹	V-0		UL 94
Oxygen Index	32	%	ISO 4589-2

Injection	Typical Value	Unit
Drying Temperature	120	°C
Drying Time	0.50 to 1.5	hr
Rear Temperature	250 to 260	°C
Front Temperature	260 to 290	°C
Processing (Melt) Temp	270	°C
Mold Temperature	120 to 140	°C
Injection Rate	Fast	

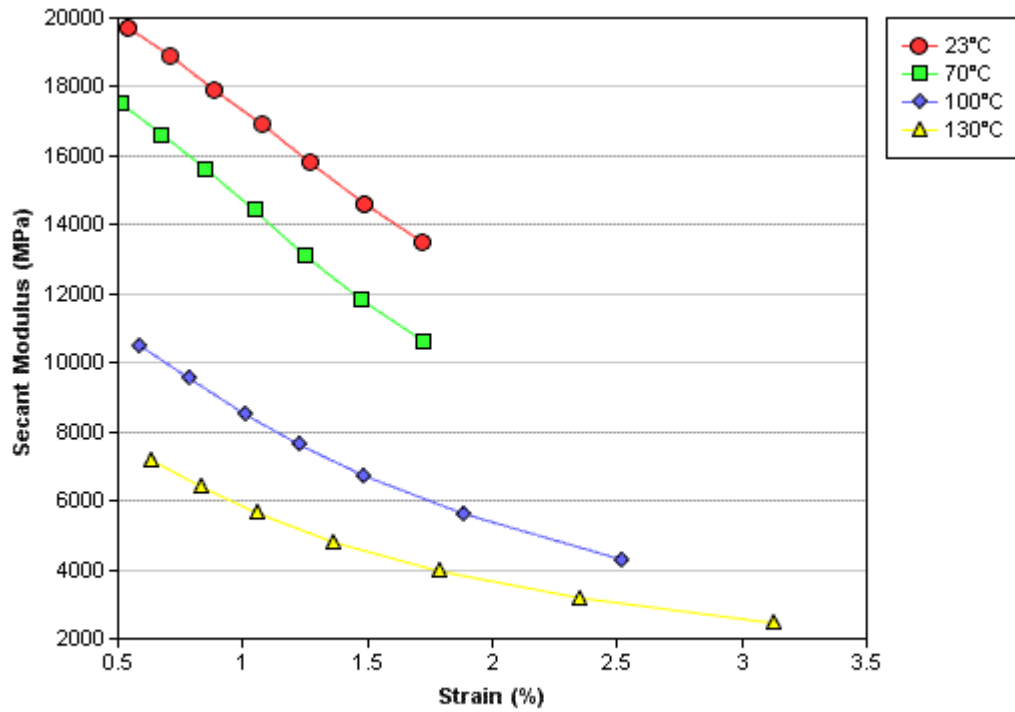
Injection Notes

Hot Runner: 482° to 500°F

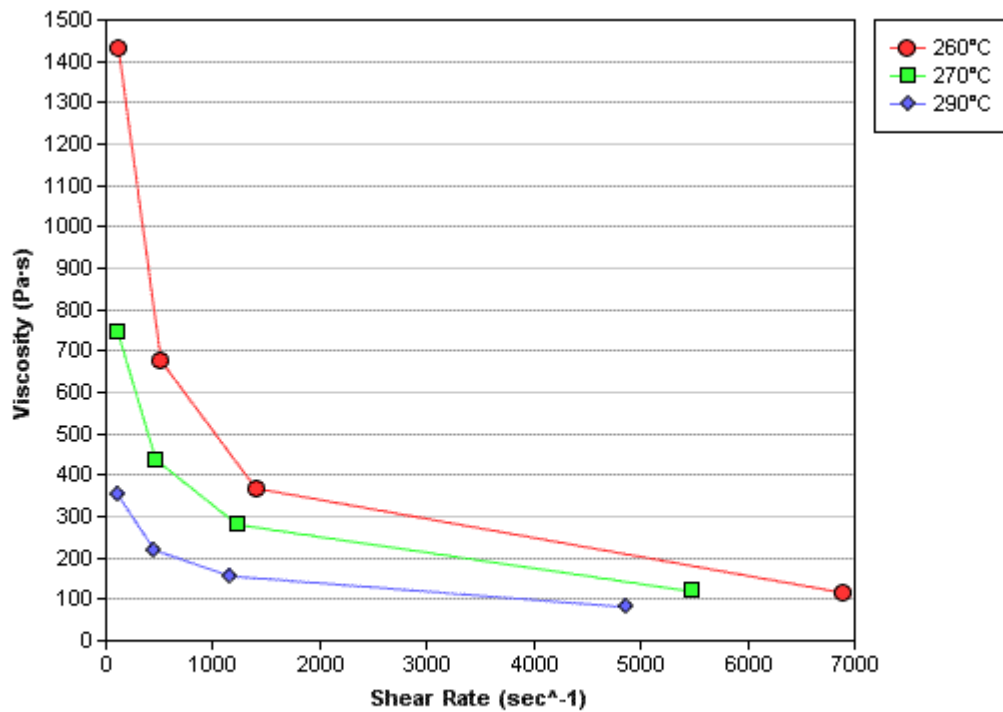
Isothermal Stress vs. Strain (ISO 11403-1)



Secant Modulus vs. Strain (ISO 11403-1)



Viscosity vs. Shear Rate (ISO 11403-2)



Notes

¹ These flammability ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions.

For assistance with an emergency involving products of Solvay Advanced Polymers, such as a spill, leak, fire, or explosion, call day or night:

Emergency Health Information

USA +1.800.621.4590

International +1.770.772.8577

Emergency Spill Information

USA +1.800.424.9300 / +1.703.527.3887

(CHEMTREC)

Europe +44 208.762.8322 (CARECHEM)

China +86.10.5100.3039

All other Asian countries +65.633.44.177

For additional product information, technical assistance, and Material Safety Data Sheets (MSDS), call:

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Material Safety Data Sheets (MSDS) for products of Solvay Advanced Polymers are available upon request from your sales representative or by emailing us at advancedpolymers@solvay.com. Always consult the appropriate MSDS before using any of our products.

Property values for individual batches will vary within specification limits. Unless otherwise noted, values shown are typical for uncolored resin; colorants may alter values. For Preliminary Data Sheets, values are typical of limited production and specifications are not yet established.

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