



Ixef[®] 1032

polyarylamide

Ixef1032 is a 60% glass-fiber reinforced, general purpose polyarylamide compound which exhibits very high strength and rigidity, outstanding surface gloss, and excellent creep resistance.

- Natural: Ixef 1032/0008
- Black: Ixef 1032/9008

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Asia Pacific • Europe • North America • South America
Filler / Reinforcement	• Glass Fiber Reinforcement, 60% Filler by Weight
Features	• Good Creep Resistance • Good Dimensional Stability • Good Processability • Good Surface Finish • High Rigidity • High Strength • Low to No Water Absorption
Uses	• Automotive Applications • Automotive Electronics • Cell Phones • Dental Applications • Food Service Applications • Furniture • High Gloss Applications • Medical/Healthcare Applications • Metal Replacement • Sporting Goods
RoHS Compliance	• RoHS Compliant
Automotive Specifications	• GM GM7001M • GM GM7001M PAMXD6 A4 A22 A64 BA661 DC1770 G30 KS2400 MS1800 NS340 RT7 SS225 Color: 0008 Natural • GM GM7001M PAMXD6 A4 A22 A64 BA661 DC1770 G30 KS2400 MS1800 NS340 RT7 SS225 Color: 9008 Black
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding

Physical	Dry	Conditioned Unit	Test Method
Density	1.77	-- g/cm ³	ISO 1183
Molding Shrinkage	0.10 to 0.30	-- %	Internal Method
Water Absorption (24 hr, 23°C)	0.13	-- %	ISO 62
Moisture Absorption (Equil, 65% RH)	1.3	-- %	Internal Method
Mechanical	Dry	Conditioned Unit	Test Method
Tensile Modulus	24000	23000 MPa	ISO 527-2
Tensile Stress (Break)	280	250 MPa	ISO 527-2
Tensile Strain (Break)	1.8	2.0 %	ISO 527-2
Flexural Modulus	23500	-- MPa	ISO 178
Flexural Strength	400	-- MPa	ISO 178
Impact	Dry	Conditioned Unit	Test Method
Notched Izod Impact	120	-- J/m	ASTM D256
Unnotched Izod Impact	900	-- J/m	ASTM D256

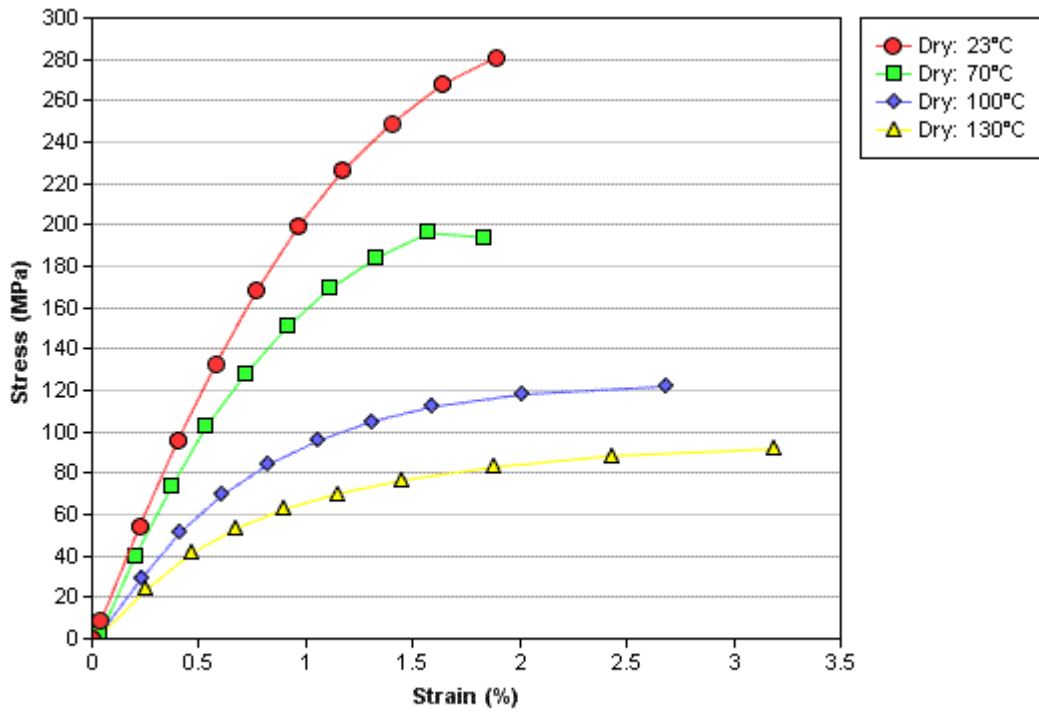
Thermal	Dry	Conditioned Unit	Test Method
Heat Deflection Temperature 1.8 MPa, Unannealed	230	-- °C	ISO 75-2/A
CLTE - Flow	0.000014	-- cm/cm/°C	ISO 11359-2
Electrical	Dry	Conditioned Unit	Test Method
Volume Resistivity	1.0E+13	-- ohm-cm	IEC 60093
Dielectric Constant (110 Hz)	4.50	--	IEC 60250
Dissipation Factor (110 Hz)	0.0090	--	IEC 60250
Comparative Tracking Index	600	-- V	IEC 60112
Electric Strength	24	-- kV/mm	IEC 60243-1
Flammability	Dry	Conditioned Unit	Test Method
Flame Rating - UL ¹	HB	--	UL 94
Oxygen Index	25	-- %	ISO 4589-2

Injection	Typical Value Unit
Drying Temperature	80.0 °C
Drying Time	12 hr
Suggested Max Moisture	0.30 %
Rear Temperature	250 to 260 °C
Middle Temperature	260 to 270 °C
Front Temperature	270 to 280 °C
Nozzle Temperature	260 to 290 °C
Processing (Melt) Temp	280 °C
Mold Temperature	120 to 140 °C
Injection Pressure	50.0 to 150 MPa
Injection Rate	Fast
Holding Pressure	75.0 MPa
Back Pressure	0.00 to 1.00 MPa
Screw L/D Ratio	15.0:1.0 to 20.0:1.0

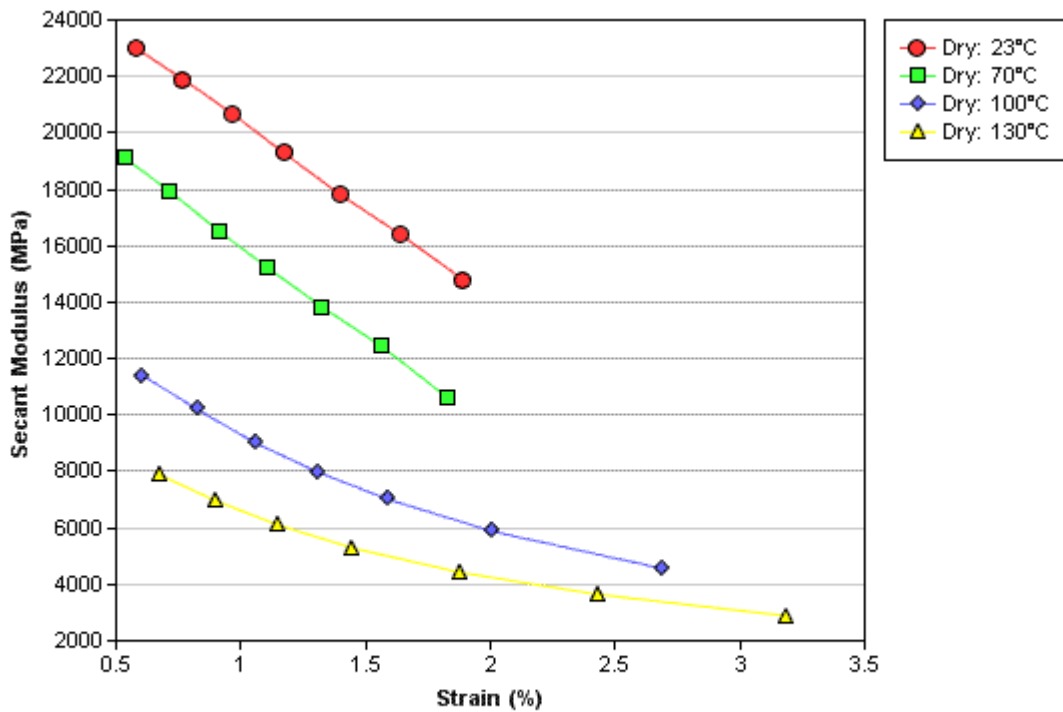
Injection Notes

Injection time: 0.5 to 2.5 sec
Holding time: 3e sec
Cooling time: $2.5e^2$ sec
(e= wall thickness in mm)

Isothermal Stress vs. Strain (ISO 11403-1)



Secant Modulus vs. Strain (ISO 11403-1)



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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