

ForTii® Ace JTX8

PPA—GF30

30% Glass Reinforced, PA4T, Electro-friendly, Improved resistance to blistering during reflow – soldering process, Improved color stability

ForTii® Ace JTX8 is the only polyamide grade in the world that secures, in all product designs, the JEDEC MSL 1 rating at all thicknesses. Ace JTX8 has the highest Tg available in polyamides (160°C) to satisfy various industry requirements like chemical resistance and high temperature thermal ageing. Ace JTX8 has extremely robust processing performance and allows 100% regrinding with high mechanical properties retention.

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
RHEOLOGICAL PROPERTIES			
	DRY / COND		
Molding shrinkage (parallel)	0.43 / *	%	ISO 294-4
Molding shrinkage (normal)	1.2 / *	%	ISO 294-4
MECHANICAL PROPERTIES			
	DRY / COND		
Tensile modulus	11000 / 11000	MPa	ISO 527-1/-2
Tensile modulus (-40°C)	11700 / –	MPa	ISO 527-1/-2
Tensile modulus (40°C)	10500 / –	MPa	ISO 527-1/-2
Tensile modulus (80°C)	10300 / 9500	MPa	ISO 527-1/-2
Tensile modulus (100°C)	10200 / –	MPa	ISO 527-1/-2
Tensile modulus (120°C)	9500 / –	MPa	ISO 527-1/-2
Tensile modulus (160°C)	6000	MPa	ISO 527-1/-2
Tensile modulus (200°C)	4000	MPa	ISO 527-1/-2
Stress at break	210 / 190	MPa	ISO 527-1/-2
Stress at break (-40°C)	240 / –	MPa	ISO 527-1/-2
Stress at break (40°C)	200 / –	MPa	ISO 527-1/-2
Stress at break (80°C)	180 / 120	MPa	ISO 527-1/-2
Stress at break (100°C)	170 / –	MPa	ISO 527-1/-2
Stress at break (120°C)	150 / –	MPa	ISO 527-1/-2
Stress at break (160°C)	100	MPa	ISO 527-1/-2
Stress at break (200°C)	75	MPa	ISO 527-1/-2

Property Data

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Strain at break	2.7 / 2.5	%	ISO 527-1/-2
Strain at break (-40°C)	2.8 / -	%	ISO 527-1/-2
Strain at break (40°C)	2.6 / -	%	ISO 527-1/-2
Strain at break (80°C)	2.8 / 3	%	ISO 527-1/-2
Strain at break (100°C)	2.7 / -	%	ISO 527-1/-2
Strain at break (120°C)	3 / -	%	ISO 527-1/-2
Strain at break (160°C)	5	%	ISO 527-1/-2
Strain at break (200°C)	6	%	ISO 527-1/-2
Flexural modulus	10500 / 10500	MPa	ISO 178
Flexural strength	300 / 275	MPa	ISO 178
Flexural modulus (120°C)	9500	MPa	ISO 178
Flexural modulus (160°C)	5700	MPa	ISO 178
Flexural modulus (200°C)	3900	MPa	ISO 178
Charpy impact strength (+23°C)	70 / 60	kJ/m ²	ISO 179/1eU
Charpy impact strength (-30°C)	65 / 55	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	10 / 8	kJ/m ²	ISO 179/1eA
Charpy notched impact strength (-30°C)	10 / 8	kJ/m ²	ISO 179/1eA

THERMAL PROPERTIES	DRY / COND		
Melting temperature (10°C/min)	340 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	320 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.18 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.6 / *	E-4/°C	ISO 11359-1/-2
Burning Behav. at 3.0 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	3 / *	mm	IEC 60695-11-10
UL recognition	Yes / *	-	-
Thermal Index 5000 hrs	174	°C	IEC 60216/ISO 527-1/-2

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ELECTRICAL PROPERTIES			
	DRY / COND		
Volume resistivity	>1E13 / >1E13	Ohm*m	IEC 62631-3-1
Electric strength	45 / 40	kV/mm	IEC 60243-1
Comparative tracking index	600 / -	V	IEC 60112
Relative permittivity (1GHz)	3.92 / 3.88	-	IEC 61189-2-721
Relative permittivity (10GHz)	3.83 / -	-	IEC 61189-2-721
OTHER PROPERTIES			
	DRY / COND		
Humidity absorption	2 / *	%	Sim. to ISO 62
Density	1460 / -	kg/m³	ISO 1183