

## Xylex \* Resin FXY330DF

Americas: COMMERCIAL

Polyester+PC alloy. Diffusion Effect. Color package may affect performance.

### Property

TYPICAL PROPERTIES <sup>(1)</sup>			
	Value	Unit	Standard
<b>MECHANICAL</b>			
Tensile Stress, yld, Type I, 50 mm/min	46	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	49	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	5.2	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	170	%	ASTM D 638
Tensile Modulus, 50 mm/min	1430	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	67	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	1500	MPa	ASTM D 790
Tensile Stress, yield, 50 mm/min	49	MPa	ISO 527
Tensile Stress, break, 50 mm/min	49	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	>5.4	%	ISO 527
Tensile Strain, break, 50 mm/min	>200	%	ISO 527
Tensile Modulus, 1 mm/min	1570	MPa	ISO 527
Flexural Modulus, 2 mm/min	1600	MPa	ISO 178
<b>IMPACT</b>			
Izod Impact, notched, 23°C	70	J/m	ASTM D 256
Izod Impact, notched, 0°C	64	J/m	ASTM D 256
Izod Impact, notched, -30°C	55	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	60	J	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	6	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	4	kJ/m <sup>2</sup>	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	7	kJ/m <sup>2</sup>	ISO 179/1eA
<b>THERMAL</b>			
Vicat Softening Temp, Rate B/50	89	°C	ASTM D 1525
HDT, 1.82 MPa, 3.2mm, unannealed	72	°C	ASTM D 648
CTE, -40°C to 40°C, flow	8.9E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	9.4E-05	1/°C	ASTM E 831
Vicat Softening Temp, Rate B/50	92	°C	ISO 306
Vicat Softening Temp, Rate B/120	93	°C	ISO 306
<b>PHYSICAL</b>			
Specific Gravity	1.17	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.5 - 0.7	%	SABIC Method
Mold Shrinkage, xflow, 3.2 mm	0.4 - 0.6	%	SABIC Method
Melt Flow Rate, 265°C/2.16kg	14	g/10 min	ASTM D 1238
Density	1.17	g/cm <sup>3</sup>	ISO 1183
Water Absorption, (23°C/sat)	0.7	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.27	%	ISO 62
Melt Volume Rate, MVR at 265°C/2.16 kg	13	cm <sup>3</sup> /10 min	ISO 1133

Source GMD, last updated:07/11/2005

### Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	65 - 75	°C
Drying Time	3 - 5	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	245 - 265	°C
Nozzle Temperature	245 - 265	°C
Front - Zone 3 Temperature	245 - 265	°C
Middle - Zone 2 Temperature	240 - 260	°C
Rear - Zone 1 Temperature	240 - 250	°C
Mold Temperature	45 - 60	°C
Back Pressure	0.2 - 0.5	MPa
Screw Speed	20 - 100	rpm
Shot to Cylinder Size	40 - 80	%
Vent Depth	0.013 - 0.02	mm

Source GMD, last updated:07/11/2005

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR [\(LOCAL SALES OFFICE\)](#) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.

(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

(4) Internal measurements according to UL standards.

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