

Xylex* Resin FXY310DM

Asia Pacific: COMMERCIAL

PC+Polyester alloy in special effects colors. Impact Modified

TYPICAL PROPERTIES ¹	TYPICAL VALUE	UNIT	STANDARD
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	420	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	410	kgf/cm ²	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	4.5	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	125	%	ASTM D 638
Tensile Modulus, 50 mm/min	14700	kgf/cm ²	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	650	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	16500	kgf/cm ²	ASTM D 790
Tensile Stress, yield, 50 mm/min	39	MPa	ISO 527
Tensile Stress, break, 50 mm/min	39	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	3.6	%	ISO 527
Tensile Strain, break, 50 mm/min	127.7	%	ISO 527
Tensile Modulus, 1 mm/min	1690	MPa	ISO 527
Flexural Modulus, 2 mm/min	1430	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	70	cm-kgf/cm	ASTM D 256
Izod Impact, notched, -20°C	53	cm-kgf/cm	ASTM D 256
Instrumented Impact Total Energy, 23°C	530	cm-kgf	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	49	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -10°C	36	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	66	kJ/m ²	ISO 179/1eA
THERMAL			
Vicat Softening Temp, Rate B/50	92	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	79	°C	ASTM D 648



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	UNIT	STANDARD
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	75	°C	ASTM D 648
CTE, -40°C to 40°C, flow	8.3E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	8.73E-05	1/°C	ASTM E 831
Vicat Softening Temp, Rate B/50	93	°C	ISO 306
Vicat Softening Temp, Rate B/120	94	°C	ISO 306
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	76	°C	ISO 75/Ae
PHYSICAL			
Specific Gravity	1.15	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.5 - 0.7	%	SABIC Method
Mold Shrinkage, xflow, 3.2 mm	0.6 - 0.7	%	SABIC Method
Melt Flow Rate, 265°C/2.16kg	8	g/10 min	ASTM D 1238
Density	1.15	g/cm ³	ISO 1183
Water Absorption, (23°C/sat)	0.21	%	ISO 62
Melt Volume Rate, MVR at 265°C/2.16 kg	8	cm ³ /10 min	ISO 1133



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PROCESSING PARAMETERS	TYPICAL 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

- Parts may initially appear hazy directly from the mold, but will clear upon reaching ambient temperature.

