

XYLEXTM RESIN X8303

REGION EUROPE

DESCRIPTION

PC+ POLYESTER, Transparent, Low processing Temperature, High flow with excellent impact, UV stabilized. For In Mold Decoration /Labeling.

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	46	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	44	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	5	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	140	%	ASTM D 638
Tensile Modulus, 5 mm/min	1680	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	72	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	1620	MPa	ASTM D 790
Tensile Stress, yield, 50 mm/min	48	MPa	ISO 527
Tensile Stress, break, 50 mm/min	43	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	6	%	ISO 527
Tensile Strain, break, 50 mm/min	140	%	ISO 527
Tensile Modulus, 1 mm/min	1690	MPa	ISO 527
Flexural Stress, break, 2 mm/min	72	MPa	ISO 178
Flexural Modulus, 2 mm/min	1720	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	1000	J/m	ASTM D 256
Izod Impact, notched, -30°C	100	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	65	J	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	20	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	9	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	14	kJ/m ²	ISO 179/1eA
THERMAL			
Vicat Softening Temp, Rate B/50	98	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	92	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	80	°C	ASTM D 648
CTE, -40°C to 40°C, flow	9.E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	9.E-05	1/°C	ASTM E 831
CTE, 23°C to 60°C, flow	9.2E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	9.8E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	100	°C	ISO 306
Vicat Softening Temp, Rate B/120	100	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	90	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.2	-	ASTM D 792

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Mold Shrinkage, flow, 3.2 mm	0.4 – 0.8	%	SABIC method
Melt Flow Rate, 265°C/2.16kgf	30	g/ 10 min	ASTM D 1238
Density	1.2	g/cm ³	ISO 1183
Water Absorption, (23°C/saturated)	0.5	%	ISO 62-1
Moisture Absorption (23°C / 50% RH)	0.2	%	ISO 62
Melt Volume Rate, MVR at 265°C/2.16 kg	27	cm ³ /10 min	ISO 1133
OPTICAL			
Light Transmission, 2.54 mm	88	%	ASTM D 1003
Haze, 2.54 mm	2	%	ASTM D 1003
INJECTION MOLDING			
Drying Temperature	70 – 80	°C	
Drying Time	3 – 5	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	240 – 270	°C	
Nozzle Temperature	240 – 270	°C	
Front - Zone 3 Temperature	240 – 270	°C	
Middle - Zone 2 Temperature	235 – 265	°C	
Rear - Zone 1 Temperature	235 – 255	°C	
Mold Temperature	50 – 70	°C	
Screw Speed	20 – 100	rpm	