

CYCOLOY™ RESIN XCY620S

REGION ASIA

DESCRIPTION

PC/ABS, hydrolytically stable, standard black and natural.

TYPICAL PROPERTY VALUES

Revision 20180807

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	60	MPa	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	100	%	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	86	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2300	MPa	ASTM D790
IMPACT			
Izod Impact, notched, 23°C	680	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	55	J	ASTM D3763
Instrumented Dart Impact Total Energy, -30°C	65	J	ASTM D3763
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	60	kJ/m²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*4 sp=62mm	45	kJ/m²	ISO 179/1eA
THERMAL			
Vicat Softening Temp, Rate B/50	129	°C	ASTM D1525
HDT, 0.45 MPa, 3.2 mm, unannealed	128	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	108	°C	ASTM D648
CTE, -40°C to 40°C, flow	7.E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	7.E-05	1/°C	ASTM E831
Ball Pressure Test, 75°C +/- 2°C	PASSES	-	IEC 60695-10-2
Ball Pressure Test, approximate maximum	100	°C	IEC 60695-10-2
Vicat Softening Temp, Rate B/120	130	°C	ISO 306
PHYSICAL			
Specific Gravity	1.14	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm	0.5 – 0.7	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm	0.5 – 0.7	%	SABIC method
Melt Flow Rate, 260°C/5.0 kgf	23	g/10 min	ASTM D1238
Density	1.14	g/cm³	ISO 1183
Water Absorption, (23°C/24hrs)	0.3	%	ISO 62-1
ELECTRICAL			
Volume Resistivity	>1.E+16	Ω.cm	IEC 60093
Surface Resistivity, ROA	>1.E+16	Ω	IEC 60093
Dielectric Strength, in oil, 0.8 mm	39	kV/mm	IEC 60243-1
Dielectric Strength, in oil, 1.6 mm	25	kV/mm	IEC 60243-1
Dielectric Strength, in oil, 3.2 mm	17	kV/mm	IEC 60243-1
INJECTION MOLDING			
Drying Temperature	95 – 105	°C	
Drying Time	2 – 4	Hrs	

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Maximum Moisture Content	0.02	%	
Melt Temperature	260 – 290	°C	
Nozzle Temperature	240 – 280	°C	
Front - Zone 3 Temperature	250 – 290	°C	
Middle - Zone 2 Temperature	250 – 290	°C	
Rear - Zone 1 Temperature	230 – 260	°C	
Hopper Temperature	60 – 80	°C	
Mold Temperature	60 – 90	°C	

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