

CYCOLOY™ FR RESIN C6600

REGION ASIA

DESCRIPTION

Nonbrominated, nonchlorinated FR PC+ABS with balanced flow, impact and hydrolytic stability for a wide variety of applications including business equipment, monitors, enclosures, among others.

TYPICAL PROPERTY VALUES

Revision 20170612

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	63	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	4	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	80	%	ASTM D 638
Tensile Modulus, 50 mm/min	3000	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	94	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2620	MPa	ASTM D 790
IMPACT			
Izod Impact, notched, 23°C	550	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	51	J	ASTM D 3763
Instrumented Impact Total Energy, -30°C	51	J	ASTM D 3763
THERMAL			
Vicat Softening Temp, Rate B/50	99	°C	ASTM D 1525
HDT, 1.82 MPa, 3.2mm, unannealed	83	°C	ASTM D 648
HDT, 0.45 MPa, 6.4 mm, unannealed	98	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	90	°C	ASTM D 648
Relative Temp Index, Elec	80	°C	UL 746B
Relative Temp Index, Mech w/impact	70	°C	UL 746B
Relative Temp Index, Mech w/o impact	80	°C	UL 746B
PHYSICAL			
Specific Gravity	1.19	-	ASTM D 792
Water Absorption, 24 hours	0.11	%	ASTM D 570
Mold Shrinkage, flow, 3.2 mm (5)	0.4 – 0.6	%	SABIC method
Melt Flow Rate, 260°C/2.16 kgf	21.5	g/10 min	ASTM D 1238
ELECTRICAL			
Volume Resistivity	> 1.E+15	Ohm-cm	IEC 60093
Surface Resistivity, ROA	> 1.E+15	Ohm	IEC 60093

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Dielectric Strength, in oil, 3.2 mm	17	kV/mm	IEC 60243-1
Relative Permittivity, 1 MHz	2.7	-	IEC 60250
Dissipation Factor, 50/60 Hz	0.004	-	IEC 60250
Dissipation Factor, 1 MHz	0.006	-	IEC 60250
Relative Permittivity, 50/60 Hz	2.7	-	IEC 60250
FLAME CHARACTERISTICS			
UL Recognized, 94V-2 Flame Class Rating (3)	0.75	mm	UL 94
UL Recognized, 94V-0 Flame Class Rating (3)	1.5	mm	UL 94
UL Recognized, 94-5VB Rating (3)	2	mm	UL 94
INJECTION MOLDING			
Drying Temperature	80 – 90	°C	
Drying Time	3 – 4	hrs	
Drying Time (Cumulative)	8	hrs	
Maximum Moisture Content	0.04	%	
Melt Temperature	245 – 275	°C	
Nozzle Temperature	245 – 275	°C	
Front - Zone 3 Temperature	245 – 275	°C	
Middle - Zone 2 Temperature	220 – 275	°C	
Rear - Zone 1 Temperature	220 – 255	°C	
Mold Temperature	60 – 80	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	40 – 70	rpm	
Shot to Cylinder Size	30 – 80	%	
Vent Depth	0.038 – 0.076	mm	

DISCLAIMER

The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.

It is the customer's responsibility to inspect and test our product(s) in order to satisfy itself as to the suitability of the product(s) for its and its customers particular purposes. The customer is responsible for the appropriate, safe and legal use, processing and handling of all product(s) purchased from us.

Nothing herein is intended to be nor shall it constitute a warranty whatsoever, in particular, warranty of merchantability or fitness for a particular purpose.

SABIC as referred to herein means any legal entity belonging to the group of companies headed by Saudi Arabia Basic Industries Corporation.