CYCOLAC™ BDT6500 resin

Acrylonitrile Butadiene Styrene

SABIC Innovative Plastics

Message:

AUTOMOTIVE. Low gloss, color concentratable for interior applications. Natural only.

General Information	
UL YellowCard	E121562-220713
Features	Low Gloss
Uses	Automotive Interior Parts
Appearance	Natural Color
Processing Method	Injection Molding
Multi-Point Data	Coefficient of Thermal Expansion vs. Temperature (ASTM E831)
	Compressive Stress vs. Strain (ASTM D695)
	Elastic Modulus vs Temperature (ASTM D4065)
	Flexural DMA (ASTM D4065)
	Instrumented Impact (Energy) (ASTM D3763)
	Instrumented Impact (Load) (ASTM D3763)
	Pressure-Volume-Temperature (PVT - Zoller Method)
	Shear DMA (ASTM D4065)
	Specific Heat vs. Temperature (ASTM D3417)
	Tensile Creep (ASTM D2990)
	Tensile Fatigue
	Tensile Stress vs. Strain (ASTM D638)
	Thermal Conductivity vs. Temperature (ASTM E1530)
	Viscosity vs. Shear Rate (ASTM D3835)

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.05	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	3.3	g/10 min	ASTM D1238
Spiral Flow	86.4	cm	Internal Method
Molding Shrinkage - Flow (3.20 mm)	0.50 to 0.80	%	Internal Method
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus [1]	2210	MPa	ASTM D638
Tensile Strength [2] (Yield)	48.3	MPa	ASTM D638
Flexural Modulus [3] (50.0 mm Span)	2410	MPa	ASTM D790
Flexural Strength [4] (Yield, 50.0 mm Span)	72.4	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (23°C)	190	J/m	ASTM D256
Gardner Impact (23°C)	42.0	J	ASTM D3029

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed, 3.20 mm	93.9	°C	
1.8 MPa, Unannealed, 3.20 mm	81.1	°C	
1.8 MPa, Unannealed, 6.40 mm	85.0	°C	
CLTE - Flow (-40 to 60°C)	1.5E-4	cm/cm/°C	ASTM E831
RTI Elec	60.0	°C	UL 746
RTI Imp	60.0	°C	UL 746
RTI Str	60.0	°C	UL 746
Electrical	Nominal Value		Test Method
Comparative Tracking Index (CTI)	PLC 1		UL 746
High Amp Arc Ignition (HAI)	PLC 0		UL 746
Hot-wire Ignition (HWI)	PLC 4		UL 746
Flammability	Nominal Value		Test Method
Flame Rating (1.47 mm)	HB		UL 94
Optical	Nominal Value		Test Method
Gardner Gloss (60°, Untextured)	25		ASTM D523
Fill Analysis	Nominal Value	Unit	Test Method
Melt Viscosity (260°C, 1000 sec^-1)	155	Pa·s	ASTM D3835
Injection	Nominal Value	Unit	
Drying Temperature	87.8 to 93.3	°C	
Drying Time	2.0 to 4.0	hr	
Drying Time, Maximum	8.0	hr	
Suggested Max Moisture	0.010	%	
Suggested Shot Size	50 to 70	%	
Rear Temperature	193 to 238	°C	
Middle Temperature	210 to 249	°C	
Front Temperature	221 to 254	°C	
Nozzle Temperature	232 to 274	°C	
Processing (Melt) Temp	232 to 274	°C	
Mold Temperature	48.9 to 82.2	°C	
Back Pressure	0.345 to 0.689	MPa	
Screw Speed	30 to 60	rpm	
Vent Depth	0.038 to 0.051	mm	
NOTE			
1.	5.0 mm/min		
2.	Type I, 5.0 mm/min		
3.	1.3 mm/min		
4.	1.3 mm/min		

Recommended distributors for this material

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