

## Cycolac\* Resin BDT6500

Americas: COMMERCIAL

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

### Property

TYPICAL PROPERTIES <sup>(1)</sup>			
	Value	Unit	Standard
<b>MECHANICAL</b>			
Tensile Stress, yld, Type I, 5 mm/min	48	MPa	ASTM D 638
Tensile Modulus, 5 mm/min	2200	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	2410	MPa	ASTM D 790
<b>IMPACT</b>			
Izod Impact, notched, 23°C	186	J/m	ASTM D 256
Falling Dart Impact (D 3029), 23°C	42	J	ASTM D 3029
<b>THERMAL</b>			
HDT, 0.45 MPa, 3.2 mm, unannealed	93	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	81	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	85	°C	ASTM D 648
CTE, -40°C to 60°C, flow	1.55E-04	1/°C	ASTM E 831
Relative Temp Index, Elec	60	°C	UL 746B
Relative Temp Index, Mech w/impact	60	°C	UL 746B
Relative Temp Index, Mech w/o impact	60	°C	UL 746B
<b>PHYSICAL</b>			
Specific Gravity	1.05	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.5 - 0.8	%	SABIC Method
Melt Flow Rate, 230°C/3.8 kgf	3.3	g/10 min	ASTM D 1238
Melt Viscosity, 260°C, 1000 sec-1	1550	poise	ASTM D 3825
Spiral Flow, 260°C, 10 ips, 3.175 X 1524 mm	863.6	mm	-
<b>OPTICAL</b>			
Gloss, untextured, 60 degrees	25	-	ASTM D 523
<b>ELECTRICAL</b>			
Hot Wire Ignition {PLC}	4	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	0	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	1	PLC Code	UL 746A
<b>FLAME CHARACTERISTICS</b>			
UL Recognized, 94HB Flame Class Rating (3)	1.47	mm	UL 94

Source GMD, last updated:12/29/1999

### Processing

Parameter	Value	Unit
<b>Injection Molding</b>		
Drying Temperature	90 - 95	°C
Drying Time	2 - 4	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.01	%
Melt Temperature	230 - 275	°C

Nozzle Temperature	230 - 275	°C
Front - Zone 3 Temperature	220 - 255	°C
Middle - Zone 2 Temperature	210 - 250	°C
Rear - Zone 1 Temperature	195 - 240	°C
Mold Temperature	50 - 80	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	30 - 60	rpm
Shot to Cylinder Size	50 - 70	%
Vent Depth	0.038 - 0.051	mm

Source GMD, last updated:12/29/1999

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR [\(LOCAL SALES OFFICE\)](#) FOR AVAILABILITY IN YOUR REGION

- (1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.
- (2) Only typical data for selection purposes. Not to be used for part or tool design.
- (3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
- (4) Internal measurements according to UL standards.

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