



CYCOLAC™ Resin DL100LG

Americas: COMMERCIAL

CYCOLAC DL100LG is a low gloss, high heat, high impact ABS/PC blend with low emission

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	520	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	380	kgf/cm ²	ASTM D 638
Tensile Stress, yld, Type I, 5 mm/min	470	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	400	kgf/cm ²	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	4	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	12	%	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	4	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	85	%	ASTM D 638
Tensile Modulus, 50 mm/min	22800	kgf/cm ²	ASTM D 638
Tensile Stress, yield, 5 mm/min	47	MPa	ISO 527
Tensile Stress, break, 5 mm/min	36	MPa	ISO 527
Tensile Stress, yield, 50 mm/min	51	MPa	ISO 527
Tensile Stress, break, 50 mm/min	39	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	4	%	ISO 527
Tensile Strain, break, 5 mm/min	50	%	ISO 527
Tensile Strain, yield, 50 mm/min	4	%	ISO 527
Tensile Strain, break, 50 mm/min	12	%	ISO 527
Tensile Modulus, 1 mm/min	2200	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	74	MPa	ISO 178
Flexural Modulus, 2 mm/min	2200	MPa	ISO 178
Hardness, H358/30	80	MPa	ISO 2039-1



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IMPACT			
Izod Impact, notched, 23°C	38	cm-kgf/cm	ASTM D 256
Izod Impact, notched, -30°C	11	cm-kgf/cm	ASTM D 256
Izod Impact, notched 80*10*3 +23°C	45	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*3 -30°C	19	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 +23°C	28	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	11	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm	22	kJ/m ²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm	11	kJ/m ²	ISO 179/1eA
THERMAL			
HDT, 1.82 MPa, 6.4 mm, unannealed	85	°C	ASTM D 648
CTE, -40°C to 40°C, flow	8.2E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	8.3E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate A/50	118	°C	ISO 306
Vicat Softening Temp, Rate A/120	120	°C	ISO 306
Vicat Softening Temp, Rate B/50	105	°C	ISO 306
Vicat Softening Temp, Rate B/120	107	°C	ISO 306
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	103	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	84	°C	ISO 75/Af
PHYSICAL			
Mold Shrinkage on Tensile Bar, flow (2) (5)	0.5 - 0.7	%	SABIC Method
Melt Flow Rate, 220°C/10.0 kgf	10	g/10 min	ASTM D 1238
Density	1.08	g/cm ³	ISO 1183
Melt Volume Rate, MVR at 220°C/10.0 kg	10	cm ³ /10 min	ISO 1133
Melt Volume Rate, MVR at 260°C/5.0 kg	12	cm ³ /10 min	ISO 1133



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	90 - 100	°C
Drying Time	2 - 4	hrs
Maximum Moisture Content	0.1	%
Melt Temperature	250 - 280	°C
Nozzle Temperature	245 - 275	°C
Front - Zone 3 Temperature	250 - 280	°C
Middle - Zone 2 Temperature	250 - 280	°C
Rear - Zone 1 Temperature	230 - 260	°C
Hopper Temperature	60 - 80	°C
Mold Temperature	40 - 80	°C