

CYCOLACTM RESIN MG37EPX

REGION AMERICAS

DESCRIPTION

ABS plating grade optimized for a broad processing window for both painted and plated applications. NSF standard 61 compliant (80 sq in/L)

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	44	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	54	%	ASTM D 638
Tensile Modulus, 5 mm/min	2470	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	90	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2810	MPa	ASTM D 790
Hardness, Rockwell R	106	-	ASTM D 785
Tensile Stress, yield, 5 mm/min	48	MPa	ISO 527
Tensile Stress, break, 5 mm/min	39	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2	%	ISO 527
Tensile Strain, break, 5 mm/min	18.3	%	ISO 527
Tensile Modulus, 1 mm/min	2760	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	73	MPa	ISO 178
Flexural Modulus, 2 mm/min	2470	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	250	J/m	ASTM D 256
Izod Impact, notched, -40°C	88	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	35	J	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	23	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	8	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -40°C	6	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	88	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	76	°C	ASTM D 648
CTE, -40°C to 40°C, flow	6.E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	6.E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/50	98	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	82	°C	ISO 75 /Af
PHYSICAL			
Specific Gravity	1.05	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.4 – 0.6	%	SABIC method
Melt Flow Rate, 230°C/3.8 kg	6.6	g/10 min	ASTM D 1238
Melt Viscosity, 240°C, 1000 sec-1	2170	Poise	ASTM D 3825
Density	1.05	g/cm ³	ISO 1183
Melt Flow Rate, 220°C/10.0 kg	22	g/10 min	ISO 1133



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FLAME CHARACTERISTICS			
UL Yellow Card Link	E121562-100896040	-	-
UL Recognized, 94HB Flame Class Rating	1.52	mm	UL 94
INJECTION MOLDING			
Drying Temperature	80 – 95	°C	
Drying Time	2 – 4	hrs	
Drying Time (Cumulative)	8	hrs	
Maximum Moisture Content	0.05	%	
Melt Temperature	255 – 280	°C	
Nozzle Temperature	255 – 280	°C	
Front - Zone 3 Temperature	250 – 270	°C	
Middle - Zone 2 Temperature	230 – 245	°C	
Rear - Zone 1 Temperature	215 – 230	°C	
Mold Temperature	40 – 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	

