

CYCOLACT™ RESIN MGABS01

REGION AMERICAS

DESCRIPTION

Injection molding ABS. High impact, high gloss, good flow.

TYPICAL PROPERTY VALUES

Revision 20190814

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	41	MPa	ASTM D638
Tensile Stress, brk, Type I, 5 mm/min	31	MPa	ASTM D638
Tensile Strain, yld, Type I, 5 mm/min	2.1	%	ASTM D638
Tensile Strain, brk, Type I, 5 mm/min	26	%	ASTM D638
Tensile Modulus, 5 mm/min	2100	MPa	ASTM D638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	68	MPa	ASTM D790
Flexural Modulus, 1.3 mm/min, 50 mm span	2200	MPa	ASTM D790
IMPACT			
Izod Impact, notched, 23°C	347	J/m	ASTM D256
Instrumented Dart Impact Total Energy, 23°C	31	J	ASTM D3763
THERMAL			
Vicat Softening Temp, Rate B/50	98	°C	ASTM D1525
HDT, 0.45 MPa, 3.2 mm, unannealed	97	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	82	°C	ASTM D648
CTE, -40°C to 40°C, flow	8.82E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	8.64E-05	1/°C	ASTM E831
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
PHYSICAL			
Specific Gravity	1.04	-	ASTM D792
Mold Shrinkage, flow, 3.2 mm	0.5 – 0.8	%	SABIC method
Melt Flow Rate, 230°C/3.8 kg	3.7	g/10 min	ASTM D1238
Melt Viscosity, 240°C, 1000 sec-1	2400	Poise	ASTM D3825
Melt Volume Rate, MVR at 220°C/10.0 kg	15	cm³/10 min	ISO 1133
ELECTRICAL			
Arc Resistance, Tungsten {PLC}	5	PLC Code	ASTM D495
Hot Wire Ignition {PLC}	3	PLC Code	UL 746A
High Voltage Arc Track Rate {PLC}	2	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	0	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	0	PLC Code	UL 746A
FLAME CHARACTERISTICS			
UL Yellow Card Link	E121562-220712	-	-
UL Recognized, 94HB Flame Class Rating	1.52	mm	UL 94
INJECTION MOLDING			

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CHEMISTRY THAT MATTERS™



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Drying Temperature	80 – 95	°C	
Drying Time	2 – 4	Hrs	
Drying Time (Cumulative)	8	Hrs	
Maximum Moisture Content	0.1	%	
Melt Temperature	220 – 260	°C	
Nozzle Temperature	220 – 260	°C	
Front - Zone 3 Temperature	215 – 240	°C	
Middle - Zone 2 Temperature	205 – 225	°C	
Rear - Zone 1 Temperature	190 – 210	°C	
Mold Temperature	50 – 70	°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	

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