

CYCOLAC™ RESIN MG34LG

REGION AMERICAS

DESCRIPTION

Automotive, low gloss ABS.

TYPICAL PROPERTY VALUES

Revision 20170816

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	40	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	33	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	2	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	25	%	ASTM D 638
Tensile Modulus, 5 mm/min	2130	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	68	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2200	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	38	MPa	ISO 527
Tensile Stress, break, 5 mm/min	31	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.1	%	ISO 527
Tensile Strain, break, 5 mm/min	25.7	%	ISO 527
Tensile Modulus, 1 mm/min	2260	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	62	MPa	ISO 178
Flexural Modulus, 2 mm/min	2060	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	245	J/m	ASTM D 256
Izod Impact, notched, -30°C	42	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	35	J	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	18	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	7	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	18	kJ/m ²	ISO 179/1eA
THERMAL			
Vicat Softening Temp, Rate B/50	98	°C	ASTM D 1525
HDT, 1.82 MPa, 3.2mm, unannealed	82	°C	ASTM D 648
CTE, -40°C to 40°C, flow	9.36E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	9.36E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	9.36E-05	1/°C	ISO 11359-2



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -40°C to 40°C, xflow	9.36E-05	1/°C	ISO 11359-2
Ball Pressure Test, 75°C +/- 2°C	PASSES	-	IEC 60695-10-2
Vicat Softening Temp, Rate B/50	97	°C	ISO 306
Vicat Softening Temp, Rate B/120	101	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	81	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.04	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm (5)	0.5 – 0.8	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm (5)	0.5 – 0.8	%	SABIC method
Melt Flow Rate, 200°C/3.8 kgf	6	g/10 min	ASTM D 1238
Density	1.03	g/cm³	ISO 1183
Water Absorption, (23°C/sat)	1	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.2	%	ISO 62
Melt Volume Rate, MVR at 220°C/10.0 kg	24	cm³/10 min	ISO 1133
INJECTION MOLDING			
Drying Temperature	80 – 90	°C	
Drying Time	2 – 4	hrs	
Drying Time (Cumulative)	8	hrs	
Maximum Moisture Content	0.1	%	
Melt Temperature	230 – 275	°C	
Nozzle Temperature	230 – 275	°C	
Front - Zone 3 Temperature	230 – 245	°C	
Middle - Zone 2 Temperature	215 – 225	°C	
Rear - Zone 1 Temperature	200 – 210	°C	
Mold Temperature	25 – 60	°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	

DISCLAIMER

The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.

It is the customer's responsibility to inspect and test our product(s) in order to satisfy itself as to the suitability of the product(s) for its and its customers particular purposes. The customer is responsible for the appropriate, safe and legal use, processing and handling of all product(s) purchased from us.

Nothing herein is intended to be nor shall it constitute a warranty whatsoever, in particular, warranty of merchantability or fitness for a particular purpose.

SABIC as referred to herein means any legal entity belonging to the group of companies headed by Saudi Arabia Basic Industries Corporation.

