



CYCOLAC™ RESIN EXABS01

REGION AMERICAS

DESCRIPTION

Sheet extrusion ABS with medium impact.

TYPICAL PROPERTY VALUES

Revision 20170816

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	39	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	28	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	3.1	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	31.6	%	ASTM D 638
Tensile Modulus, 5 mm/min	2030	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	63	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2100	MPa	ASTM D 790
IMPACT			
Izod Impact, notched, 23°C	411	J/m	ASTM D 256
Izod Impact, notched, -30°C	277	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	33	J	ASTM D 3763
THERMAL			
Vicat Softening Temp, Rate B/50	106	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	93	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	80	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.01E-04	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	1.04E-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
PHYSICAL			
Specific Gravity	1.03	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm (5)	0.6 – 0.8	%	SABIC method
Melt Viscosity, 240°C, 100 sec-1	14000	Poise	ASTM D 3825
Melt Volume Rate, MVR at 220°C/10.0 kg	4	cm³/10 min	ISO 1133
ELECTRICAL			
Arc Resistance, Tungsten {PLC}	5	PLC Code	ASTM D 495

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Hot Wire Ignition {PLC}	4	PLC Code	UL 746A
High Voltage Arc Track Rate {PLC}	1	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	4	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	0	PLC Code	UL 746A
FLAME CHARACTERISTICS			
UL Recognized, 94HB Flame Class Rating (3)	1.52	mm	UL 94
EXTRUSION BLOW MOLDING			
Drying Temperature	80 – 90	°C	
Drying Time	4 – 5	hrs	
Drying Time (Cumulative)	24	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature (Parison)	215 – 230	°C	
Barrel - Zone 1 Temperature	205 – 225	°C	
Barrel - Zone 2 Temperature	205 – 225	°C	
Barrel - Zone 3 Temperature	205 – 225	°C	
Barrel - Zone 4 Temperature	205 – 225	°C	
Adapter - Zone 5 Temperature	210 – 230	°C	
Head - Zone 6 - Top Temperature	215 – 230	°C	
Head - Zone 7 - Bottom Temperature	215 – 230	°C	
Screw Speed	20 – 60	rpm	
Extruder Feed Zone Temperature	60 – 75	°C	
Mold Temperature	40 – 80	°C	
Die Temperature	215 – 235	°C	
SHEET EXTRUSION			
Drying Temperature	80 – 95	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	215 – 260	°C	
Barrel - Zone 1 Temperature	170 – 200	°C	
Barrel - Zone 2 Temperature	180 – 220	°C	
Barrel - Zone 3 Temperature	190 – 225	°C	
Barrel - Zone 4 Temperature	200 – 240	°C	
Adapter Temperature	205 – 250	°C	
Die Temperature	205 – 250	°C	
Roll Stack Temp - Top	90 – 95	°C	
Roll Stack Temp - Middle	95 – 105	°C	
Roll Stack Temp - Bottom	100 – 105	°C	



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.

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