

SABIC CYCOLAC™ EXABS01

Sheet extrusion ABS with medium impact.
Information provided by SABIC

Physical Properties	Metric	English	Comments
Specific Gravity	1.03 g/cc	1.03 g/cc	ASTM D792
Viscosity	1.40e+6 cP @Shear Rate 100 1/s, Temperature 240 °C	1.40e+6 cP @Shear Rate 100 1/s, Temperature 464 °F	melt; ASTM D3825
Linear Mold Shrinkage, Flow	0.0060 - 0.0080 cm/cm @Thickness 3.20 mm	0.0060 - 0.0080 in/in @Thickness 0.126 in	SABIC method
Melt Flow	4.0 g/10 min @Load 10.0 kg, Temperature 220 °C	4.0 g/10 min @Load 22.0 lb, Temperature 428 °F	cm³/10 min; ISO 1133
Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	28.0 MPa	4060 psi	5 mm/min; ASTM D638
Tensile Strength, Yield	39.0 MPa	5660 psi	5 mm/min; ASTM D638
Elongation at Break	31.6 %	31.6 %	5 mm/min; ASTM D638
Elongation at Yield	3.1 %	3.1 %	5 mm/min; ASTM D638
Tensile Modulus	2.03 GPa	294 ksi	5 mm/min; ASTM D638
Flexural Yield Strength	63.0 MPa	9140 psi	1.3 mm/min, 50 mm span; ASTM D790
Flexural Modulus	2.10 GPa	305 ksi	1.3 mm/min, 50 mm span; ASTM D790
Izod Impact, Notched	4.11 J/cm	7.70 ft-lb/in	ASTM D256
	2.77 J/cm @Temperature -30.0 °C	5.19 ft-lb/in @Temperature -22.0 °F	ASTM D256
Dart Drop, Total Energy	33.0 J	24.3 ft-lb	ASTM D3763
Electrical Properties	Metric	English	Comments
Arc Resistance	120 - 180 sec	120 - 180 sec	ASTM D495
Comparative Tracking Index	>= 600 V	>= 600 V	UL 746A
Hot Wire Ignition, HWI	7.0 - 15 sec	7.0 - 15 sec	UL 746A
High Amp Arc Ignition, HAI	0.00 - 15 arcs	0.00 - 15 arcs	UL 746A
High Voltage Arc-Tracking Rate, HVTR	10.0 - 25.4 mm/min	0.394 - 1.00 in/min	UL 746A