

# SABIC CYCOLAC™ EX75

Multi-purpose, extrusion ABS providing a favorable balance of engineering properties.  
Information provided by SABIC

Physical Properties	Metric	English	Comments
Specific Gravity	1.04 g/cc	1.04 g/cc	ASTM D792
Viscosity	1.16e+6 cP @Shear Rate 100 1/s, Temperature 240 °C	1.16e+6 cP @Shear Rate 100 1/s, Temperature 464 °F	melt; ASTM D3825
Linear Mold Shrinkage, Flow	0.0050 - 0.0070 cm/cm @Thickness 3.20 mm	0.0050 - 0.0070 in/in @Thickness 0.126 in	SABIC method
Melt Flow	9.0 g/10 min @Load 10.0 kg, Temperature 220 °C	9.0 g/10 min @Load 22.0 lb, Temperature 428 °F	cm <sup>3</sup> /10 min; ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	33.0 MPa	4790 psi	5 mm/min; ASTM D638
Tensile Strength, Yield	39.0 MPa	5660 psi	5 mm/min; ASTM D638
Elongation at Break	42.9 %	42.9 %	5 mm/min; ASTM D638
Elongation at Yield	2.4 %	2.4 %	5 mm/min; ASTM D638
Tensile Modulus	2.13 GPa	309 ksi	5 mm/min; ASTM D638
Flexural Yield Strength	73.0 MPa	10600 psi	1.3 mm/min, 50 mm span; ASTM D790
Flexural Modulus	2.40 GPa	348 ksi	1.3 mm/min, 50 mm span; ASTM D790
Izod Impact, Notched	4.21 J/cm	7.89 ft-lb/in	ASTM D256
Dart Drop, Total Energy	35.0 J	25.8 ft-lb	ASTM D3763

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	79.2 µm/m-°C @Temperature -40.0 - 40.0 °C	44.0 µin/in-°F @Temperature -40.0 - 104 °F	ASTM E831
CTE, linear, Transverse to Flow	81.0 µm/m-°C @Temperature -40.0 - 40.0 °C	45.0 µin/in-°F @Temperature -40.0 - 104 °F	ASTM E831
Deflection Temperature at 0.46 MPa (66 psi)	94.0 °C @Thickness 3.20 mm	201 °F @Thickness 0.126 in	unannealed; ASTM D648
Deflection Temperature at 1.8 MPa (264 psi)	82.0 °C @Thickness 3.20 mm	180 °F @Thickness 0.126 in	unannealed; ASTM D648
Vicat Softening Point	106 °C	223 °F	Rate B/50; ASTM D1525