

SABIC CYCOLAC™ FR15

Flame retardant ABS (non-PBBE additive). Good property/toughness. Excellent moldability. UL94 V-0/5VA rated.
Information provided by SABIC

Physical Properties	Metric	English	Comments
Specific Gravity	1.20 g/cc	1.20 g/cc	ASTM D792
Viscosity	290000 cP @Shear Rate 1000 1/s, Temperature 200 °C	290000 cP @Shear Rate 1000 1/s, Temperature 392 °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	4.0 g/10 min @Load 3.80 kg, Temperature 230 °C	4.0 g/10 min @Load 8.38 lb, Temperature 446 °F	ASTM D1238
	10 g/10 min @Load 5.00 kg, Temperature 220 °C	10 g/10 min @Load 11.0 lb, Temperature 428 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	35.0 MPa	5080 psi	5 mm/min; ASTM D638
Tensile Strength, Yield	41.0 MPa	5950 psi	5 mm/min; ASTM D638
Elongation at Break	9.0 %	9.0 %	5 mm/min; ASTM D638
Elongation at Yield	2.3 %	2.3 %	5 mm/min; ASTM D638
Tensile Modulus	2.34 GPa	339 ksi	5 mm/min; ASTM D638
Flexural Yield Strength	71.0 MPa	10300 psi	1.3 mm/min, 50 mm span; ASTM D790
Flexural Modulus	2.72 GPa	395 ksi	1.3 mm/min, 50 mm span; ASTM D790
Izod Impact, Notched	2.13 J/cm	3.99 ft-lb/in	ASTM D256
Dart Drop, Total Energy	33.0 J	24.3 ft-lb	ASTM D3763

Electrical Properties	Metric	English	Comments
Arc Resistance	0.00 - 60 sec	0.00 - 60 sec	ASTM D495
Comparative Tracking Index	250 - 400 V	250 - 400 V	UL 746A
Hot Wire Ignition, HWI	15 - 30 sec	15 - 30 sec	UL 746A
High Amp Arc Ignition, HAI	0.00 - 15 arcs	0.00 - 15 arcs	UL 746A
High Voltage Arc-Tracking Rate, HVTR	>= 150 mm/min	>= 5.91 in/min	UL 746A