SABIC Innovative Plastics Cycolac® S703T ABS (Europe-Africa-Middle East)

Category : Polymer , Thermoplastic , ABS Polymer , Acrylonitrile Butadiene Styrene (ABS), Molded

Material Notes:

CYCOLAC S703T is a super high flow ABS developed for thin wall injection/compression moulding applications.This data was supplied by SABIC-IP for the Europe-Africa-Middle East region.

Order this product through the following link:
http://www.lookpolymers.com/polymer_SABIC-Innovative-Plastics-Cycolac-S703T-ABS-Europe-Africa-Middle-East.php

Physical Properties	Metric	English	Comments
Density	1.05 g/cc	0.0379 lb/in³	ISO 1183
Moisture Absorption at Equilibrium	0.20 %	0.20 %	23°C / 50% RH; ISO 62
Water Absorption at Saturation	1.0 % @Temperature 23.0 °C	1.0 % @Temperature 73.4 °F	ISO 62
Linear Mold Shrinkage, Flow	0.0050 - 0.0070 cm/cm	0.0050 - 0.0070 in/in	on tensile bar; SABIC Method
Melt Flow	25 g/10 min @Load 5.00 kg, Temperature 220 °C	25 g/10 min @Load 11.0 lb, Temperature 428 °F	[cm^3/10 min] Melt Volume Rate; ISO 1133
	80 g/10 min @Load 10.0 kg, Temperature 220 °C	80 g/10 min @Load 22.0 lb, Temperature 428 °F	[cm^3/10 min] Melt Volume Rate; ISO 1133
	80 g/10 min @Load 10.0 kg, Temperature 220 °C	80 g/10 min @Load 22.0 lb, Temperature 428 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	115	115	ISO 2039-2
Hardness, H358/30	101 MPa	14600 psi	ISO 2039-1
Tensile Strength at Break	35.0 MPa	5080 psi	5 mm/min; ISO 527
	35.0 MPa	5080 psi	50 mm/min; ISO 527
Tensile Strength, Yield	40.0 MPa	5800 psi	5 mm/min; ISO 527
	40.0 MPa	5800 psi	50 mm/min; ISO 527
Elongation at Break	20 %	20 %	5 mm/min; ISO 527
	25 %	25 %	50 mm/min; ISO 527

Mechanical Properties	Metric	English	Comments
Elongation at Yield	2.0 %	2.0 %	5 mm/min; ISO 527
	2.0 %	2.0 %	50 mm/min; ISO 527
Tensile Modulus	2.50 GPa	363 ksi	1 mm/min; ISO 527
Flexural Yield Strength	68.0 MPa	9860 psi	2 mm/min; ISO 178
Flexural Modulus	2.50 GPa	363 ksi	2 mm/min; ISO 178
Izod Impact, Notched (ISO)	5.00 kJ/m² @Temperature -30.0 °C	2.38 ft-lb/in² @Temperature -22.0 °F	80*10*4; ISO 180/1A
	8.00 kJ/m² @Temperature 23.0 °C	3.81 ft-lb/in² @Temperature 73.4 °F	80*10*4; ISO 180/1A
Charpy Impact, Notched	0.400 J/cm² @Temperature -30.0 °C	1.90 ft-lb/in² @Temperature -22.0 °F	V-notch Edgew 80*10*4 sp=62mm; ISO 179/1eA
	0.600 J/cm² @Temperature -30.0 °C	2.86 ft-lb/in² @Temperature -22.0 °F	ISO 179/2C
	0.800 J/cm² @Temperature 23.0 °C	3.81 ft-lb/in² @Temperature 73.4 °F	V-notch Edgew 80*10*4 sp=62mm; ISO 179/1eA
Taber Abrasion, mg/1000 Cycles	90 @Load 1.00 kg	90 @Load 2.20 lb	CS-17; SABIC Method

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	80.0 µm/m-°C @Temperature 23.0 - 60.0 °C	44.4 µin/in-°F @Temperature 73.4 - 140 °F	ISO 11359-2
CTE, linear, Transverse to Flow	80.0 µm/m-°C @Temperature 23.0 - 60.0 °C	44.4 µin/in-°F @Temperature 73.4 - 140 °F	ISO 11359-2
Thermal Conductivity	0.200 W/m-K	1.39 BTU-in/hr-ft²-°F	ISO 8302
Deflection Temperature at 0.46 MPa (66 psi)	89.0 °C	192 °F	Edgew 120*10*4 sp=100mm; ISO 75/Be
Deflection Temperature at 1.8 MPa (264 psi)	78.0 °C	172 °F	Edgew 120*10*4 sp=100mm; ISO 75/Ae
Vicat Softening Point	97.0 °C	207 °F	Rate B/50; ISO 306
	100 °C	212 °F	Rate B/120; ISO 306
UL RTI, Electrical	60.0 °C	140 °F	UL 746B

Thermal Properties	Metric	English	Comments
UL RTI, Mechanical with Impact	60.0 °C	140 °F	UL 746B
UL RTI, Mechanical without Impact	60.0 °C	140 °F	UL 746B
Flammability, UL94	HB @Thickness 1.50 mm	HB @Thickness 0.0591 in	UL 94
Glow Wire Test	650 °C @Thickness 1.00 mm	1200 °F @Thickness 0.0394 in	Glow Wire Flammability Index; IEC 60695-2-12

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+15 ohm-cm	>= 1.00e+15 ohm-cm	IEC 60093
Surface Resistance	>= 1.00e+15 ohm	>= 1.00e+15 ohm	ROA; IEC 60093
Dielectric Constant	2.6 @Frequency 1.00e+6 Hz	2.6 @Frequency 1.00e+6 Hz	IEC 60250
	2.7 @Frequency 50.0 - 60.0 Hz	2.7 @Frequency 50.0 - 60.0 Hz	IEC 60250
Dielectric Strength	18.0 kV/mm @Thickness 3.20 mm	457 kV/in @Thickness 0.126 in	in oil; IEC 60243-1
	26.0 kV/mm @Thickness 1.60 mm	660 kV/in @Thickness 0.0630 in	in oil; IEC 60243-1
	35.0 kV/mm @Thickness 0.800 mm	889 kV/in @Thickness 0.0315 in	in oil; IEC 60243-1
Dissipation Factor	0.0040 @Frequency 50.0 - 60.0 Hz	0.0040 @Frequency 50.0 - 60.0 Hz	IEC 60250
	0.0080 @Frequency 1.00e+6 Hz	0.0080 @Frequency 1.00e+6 Hz	IEC 60250
Comparative Tracking Index	600 V	600 V	IEC 60112

Descriptive Properties	Value	Comments
Ball Pressure Test, 75°C +/- 2°C	PASSES	IEC 60695-10-2

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China