

Cyclics CBT® 100 Thermoplastic Resin

Category : Polymer , Thermoplastic , Polyester, TP , Polybutylene Terephthalate (PBT)

Material Notes:

CBT® 100 resin melts to a water-like viscosity when heated, then polymerizes into the engineering thermoplastic resin polybutylene terephthalate (PBT). CBT 200 resin has a processing range between 190-240°C and is available in both one and two-part systems. CBT 100 resin is formulated for compounding, injection molding, nanocomposites, rotational molding, and as a carrier resin for color and concentrates. Information provided by Cyclics Corporation.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Cyclics-CBT-100-Thermoplastic-Resin.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.31 g/cc	1.31 g/cc	ASTM D792
Density	1.14 g/cc	0.0412 lb/in ³	Liquid (Unpolymerized resin)
Viscosity	12 cP	12 cP	Melt (Unpolymerized resin); Cone and plate 10 1/s shear rate
	@Temperature 220 °C	@Temperature 428 °F	
	15 cP	15 cP	Melt (Unpolymerized resin); Cone and plate 10 1/s shear rate
	@Temperature 210 °C	@Temperature 410 °F	
	18 cP	18 cP	Melt (Unpolymerized resin); Cone and plate 10 1/s shear rate
	@Temperature 200 °C	@Temperature 392 °F	
	26 cP	26 cP	Melt (Unpolymerized resin); Cone and plate 10 1/s shear rate
	@Temperature 190 °C	@Temperature 374 °F	
	33 cP	33 cP	Melt (Unpolymerized resin); Cone and plate 10 1/s shear rate
	@Temperature 180 °C	@Temperature 356 °F	
Linear Mold Shrinkage	0.015 cm/cm	0.015 in/in	ASTM D955
	@Thickness 4.00 mm	@Thickness 0.157 in	

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	54.0 MPa	7830 psi	ISO 527
Elongation at Break	>= 50 %	>= 50 %	5 mm/min; ISO 527
Elongation at Yield	3.2 %	3.2 %	ISO 527
Tensile Modulus	2.70 GPa	392 ksi	ISO 527
Flexural Strength	74.0 MPa	10700 psi	ISO 178

Flexural Modulus Mechanical Properties	2.38 GPa Metric	345 ksi English	ISO 178 Comments
Izod Impact, Notched (ISO)	6.70 kJ/m ²	3.19 ft-lb/in ²	ISO 180/A
Izod Impact, Unnotched (ISO)	NB	NB	ISO 180/U

Thermal Properties	Metric	English	Comments
Heat of Fusion	64.0 J/g	27.5 BTU/lb	Unpolymerized resin; ASTM E793
Specific Heat Capacity	1.25 J/g-°C	0.299 BTU/lb-°F	Solid (Unpolymerized resin); ASTM E1269
	1.96 J/g-°C @Temperature 180 °C	0.468 BTU/lb-°F @Temperature 356 °F	Liquid (Unpolymerized resin); ASTM E1269
Melting Point	180 °C	356 °F	Unpolymerized resin
	225 °C	437 °F	ASTM D3418
Flammability, UL94	HB	HB	

Processing Properties	Metric	English	Comments
Processing Temperature	190 - 240 °C	374 - 464 °F	

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