

Covestro Makrolon® Rx1452 Polycarbonate

Category : Polymer , Thermoplastic , Polycarbonate (PC) , Polycarbonate, Molded

Material Notes:

ISO 7391-PC,M,(,)-09-9Global gradeMVR (300 °C/1.2 kg) 6.0 cm³/10 minMedical devicesLipid resistantuitable for sterilization with high-energy radiationComplies with the requirements of FDA-modified ISO 10993-1 and USP Class VIHigh viscosityInjection molding - Melt temperature 280 - 320 °CAvailable in color code 451118 onlyTransparent parts for medical devicesAs of 1 September 2015, Bayer MaterialScience was separated from Bayer AG and officially adopted its new name – Covestro.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Covestro-Makrolon-Rx1452-Polycarbonate.php

Physical Properties	Metric	English	Comments
Density	1.20 g/cc	0.0434 lb/in ³	ISO 1183
	1.02 g/cc @Temperature 280 °C	0.0368 lb/in ³ @Temperature 536 °F	Melt
Water Absorption	0.30 %	0.30 %	Similar to ISO 62
Moisture Absorption at Equilibrium	0.12 %	0.12 %	Similar to ISO 62
Melt Flow	16 g/10 min	16 g/10 min	ISO 1133
	@Load 1.20 kg, Temperature 300 °C	@Load 2.65 lb, Temperature 572 °F	

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	68.0 MPa	9860 psi	ISO 527-1/-2
Elongation at Break	>= 50 %	>= 50 %	Nominal; ISO 527-1/-2
Elongation at Yield	6.0 %	6.0 %	ISO 527-1/-2
Tensile Modulus	2.40 GPa	348 ksi	ISO 527-1/-2
Charpy Impact Unnotched	NB	NB	ISO 179/1eU
	NB @Temperature -30.0 °C	NB @Temperature -22.0 °F	ISO 179/1eU
Impact	5300	5300	Puncture - maximum force (N); ISO 6603-2
	6200 @Temperature -30.0 °C	6200 @Temperature -22.0 °F	Puncture - maximum force (N); ISO 6603-2
Puncture Energy	60.0 J	44.3 ft-lb	ISO 6603-2

Mechanical Properties	65.0 J Metric	47.9 ft-lb English	Comments
	@Temperature -30.0 °C	@Temperature -22.0 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	65.0 µm/m-°C	36.1 µin/in-°F	ISO 11359-1/-2
CTE, linear, Transverse to Flow	65.0 µm/m-°C	36.1 µin/in-°F	ISO 11359-1/-2
Specific Heat Capacity	1.70 J/g-°C	0.406 BTU/lb-°F	Melt
Thermal Conductivity	0.173 W/m-K	1.20 BTU-in/hr-ft²-°F	Melt
Deflection Temperature at 0.46 MPa (66 psi)	132 °C	270 °F	ISO 75-1/-2
Deflection Temperature at 1.8 MPa (264 psi)	120 °C	248 °F	ISO 75-1/-2
Vicat Softening Point	140 °C	284 °F	50°C/h 50N; ISO 306

Optical Properties	Metric	English	Comments
Transmission, Visible	80 %	80 %	transparent; thickness unknown

Processing Properties	Metric	English	Comments
Melt Temperature	280 °C	536 °F	Injection Molding; ISO 294
	280 - 320 °C	536 - 608 °F	
Mold Temperature	80.0 °C	176 °F	Injection Molding; ISO 10724
	80.0 - 120 °C	176 - 248 °F	
Ejection Temperature	130 °C	266 °F	
Injection Velocity	200 mm/sec	7.87 in/sec	ISO 294

Descriptive Properties	Value	Comments
Availability	North America	
Eff. thermal diffusivity (m²/s)	1E-07	
Feature	Release agent	
Form	Pellets	
Process	Injection Molding	

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