

Evonik CYRO XT® Polymer 255 Acrylic-Based Multipolymer Molding Compound

Category : Polymer , Thermoplastic , Acrylic (PMMA) , Acrylic, Optical Grade, Molded

Material Notes:

Data provided by CYRO Industries Uses: molded parts, refrigerator parts

Order this product through the following link:

http://www.lookpolymers.com/polymer_Evonik-CYRO-XT-Polymer-255-Acrylic-Based-Multipolymer-Molding-Compound.php

Physical Properties	Metric	English	Comments
Density	1.11 g/cc	0.0401 lb/in ³	ASTM D792
Apparent Bulk Density	0.650 g/cc	0.0235 lb/in ³	ASTM D1895
Water Absorption	<= 0.30 %	<= 0.30 %	ASTM D570
Linear Mold Shrinkage	0.0040 - 0.0070 cm/cm	0.0040 - 0.0070 in/in	ASTM D551
Melt Flow	4.0 g/10 min @Load 5.00 kg, Temperature 230 °C	4.0 g/10 min @Load 11.0 lb, Temperature 446 °F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	48	48	ASTM D785
Tensile Strength, Ultimate	57.0 MPa	8270 psi	ASTM D638
Elongation at Break	5.6 %	5.6 %	ASTM D638
Elongation at Yield	3.0 %	3.0 %	ASTM D638
Tensile Modulus	2.80 GPa	406 ksi	ASTM D638
Flexural Yield Strength	87.0 MPa	12600 psi	ASTM D790
Flexural Modulus	2.70 GPa	392 ksi	ASTM D790
Compressive Yield Strength	79.0 MPa	11500 psi	ASTM D695
Izod Impact, Notched	0.640 J/cm @Diameter 6.35 mm	1.20 ft-lb/in @Diameter 0.250 in	bar; ASTM D256
	0.480 J/cm @Diameter 6.35 mm, Temperature 0.000 °C	0.899 ft-lb/in @Diameter 0.250 in, Temperature 32.0 °F	bar; ASTM D256
Charpy Impact, Notched	0.910 J/cm ²	4.33 ft-lb/in ²	J/cm; ASTM D256

Thermal Properties	Metric	English	Comments
CTE, linear	79.0 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$	43.9 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$	
	@Temperature 0.000 - 100 $^{\circ}\text{C}$	@Temperature 32.0 - 212 $^{\circ}\text{F}$	
Specific Heat Capacity	1.30 $\text{J}/\text{g}\cdot^{\circ}\text{C}$	0.311 $\text{BTU}/\text{lb}\cdot^{\circ}\text{F}$	
	@Temperature 25.0 $^{\circ}\text{C}$	@Temperature 77.0 $^{\circ}\text{F}$	
	1.90 $\text{J}/\text{g}\cdot^{\circ}\text{C}$	0.454 $\text{BTU}/\text{lb}\cdot^{\circ}\text{F}$	
	@Temperature 100 $^{\circ}\text{C}$	@Temperature 212 $^{\circ}\text{F}$	
	2.30 $\text{J}/\text{g}\cdot^{\circ}\text{C}$	0.550 $\text{BTU}/\text{lb}\cdot^{\circ}\text{F}$	
	@Temperature 175 $^{\circ}\text{C}$	@Temperature 347 $^{\circ}\text{F}$	
Thermal Conductivity	0.220 $\text{W}/\text{m}\cdot\text{K}$	1.53 $\text{BTU}\cdot\text{in}/\text{hr}\cdot\text{ft}^2\cdot^{\circ}\text{F}$	
Deflection Temperature at 1.8 MPa (264 psi)	90.0 $^{\circ}\text{C}$	194 $^{\circ}\text{F}$	Annealed; ASTM D648
Vicat Softening Point	101 $^{\circ}\text{C}$	214 $^{\circ}\text{F}$	ASTM D1525
Flammability, UL94	HB	HB	

Optical Properties	Metric	English	Comments
Refractive Index	1.515	1.515	ASTM D542
Haze	7.0 %	7.0 %	ASTM D1003
Transmission, Visible	88 %	88 %	ASTM D1003

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