

## Evonik CYRO CyRex® 200-8005 Acrylic-Polycarbonate Alloy

Category : Polymer , Thermoplastic , Acrylic (PMMA) , Acrylic/Polycarbonate Alloy , Polycarbonate (PC)

### Material Notes:

CYREX 200-8005 alloy is an opaque, acrylic-polycarbonate alloy with an impact strength that is higher than polycarbonate. Typical properties of CYREX acrylic-polycarbonate alloy are: outstanding impact strength and toughness, excellent processing characteristics, very good chemical resistance, good heat resistance. The special property of CYREX 200-8005 alloy is medium melt flow rate, excellent resistance to both alcohol and lipid, good resistance to EtO, gamma and E-beam sterilization. Application: Used for injection molding and extrusion of both thin and thick wall applications which require excellent toughness.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Evonik-CYRO-CyRex-200-8005-Acrylic-Polycarbonate-Alloy.php](http://www.lookpolymers.com/polymer_Evonik-CYRO-CyRex-200-8005-Acrylic-Polycarbonate-Alloy.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.15 g/cc	1.15 g/cc	ASTM D792
Bulk Density	0.650 g/cc	0.0235 lb/in <sup>3</sup>	ASTM D1895
Water Absorption	<= 0.26 %	<= 0.26 %	ASTM D570
Linear Mold Shrinkage	0.0040 - 0.0080 cm/cm	0.0040 - 0.0080 in/in	ASTM D951
Melt Flow	3.5 g/10 min @Load 3.80 kg, Temperature 230 °C	3.5 g/10 min @Load 8.38 lb, Temperature 446 °F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	49	49	ASTM D785
Tensile Strength at Break	55.2 MPa	8000 psi	ASTM D638
Elongation at Break	57 %	57 %	ASTM D638
Elongation at Yield	4.3 %	4.3 %	ASTM D638
Tensile Modulus	2.21 GPa	320 ksi	ASTM D638
Flexural Strength	77.9 MPa	11300 psi	ASTM D790
Flexural Modulus	2.21 GPa	320 ksi	ASTM D790
Izod Impact, Notched	13.9 J/cm @Diameter 3.17 mm	26.0 ft-lb/in @Diameter 0.125 in	bar; ASTM D256

Thermal Properties	Metric	English	Comments
CTE, linear	93.6 µm/m-°C	52.0 µin/in-°F	ASTM D696

Thermal Properties	Metric @Temperature 0.000 - 100 °C	English @Temperature 32.0 - 212 °F	Comments
Deflection Temperature at 1.8 MPa (264 psi)	101 °C @Thickness 6.35 mm	214 °F @Thickness 0.250 in	Annealed; ASTM D648
Vicat Softening Point	141 °C	286 °F	ASTM D1525

Optical Properties	Metric	English	Comments
Transmission, Visible	0.0 %	0.0 %	Opaque; ASTM D1003

Processing Properties	Metric	English	Comments
Middle Barrel Temperature	199 - 266 °C	390 - 510 °F	Cylinder Temp
Melt Temperature	238 - 266 °C	460 - 510 °F	
Mold Temperature	65.6 - 98.9 °C	150 - 210 °F	
Drying Temperature	82.2 °C	180 °F	
Dry Time	3 - 4 hour	3 - 4 hour	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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