

Eastman DuraStar DS2110UVI Polymer, Natural

Category : Polymer , Thermoplastic , Polyester, TP , Polycyclohexylenedimethylene Terephthalate (PCT) , Glycol-Modified PCT (PCTG) Copolyester

Material Notes:

Durastar DS2110UVI polymer, contains an ultraviolet light stabilization package. It is recommended for indoor applications requiring enhanced color stability upon extended exposure to fluorescent light. It has excellent appearance and is nearly water-clear. Its other most outstanding features are toughness, chemical resistance, and excellent processing characteristics. DS2110UVI has very good toughness as shown by Izod impact resistance. Easy to process, it flows readily, fills intricate molds, and contains a mold release. This product is certified to ANSI/NSF Standard 51. Applications/Uses Appliances Furniture/Furniture trim Toys/Sporting goods Housewares Point of purchase displays

Key Attributes Good chemical resistance Excellent flow Outstanding impact resistance Excellent clarity Fast drying times Quick cycle times

Order this product through the following link:

http://www.lookpolymers.com/polymer_Eastman-DuraStar-DS2110UVI-Polymer-Natural.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.20 g/cc	1.20 g/cc	ASTM D792
Density	1.19 g/cc	0.0430 lb/in ³	ISO 1183
Linear Mold Shrinkage	0.0020 - 0.0060 cm/cm @Thickness 3.20 mm	0.0020 - 0.0060 in/in @Thickness 0.126 in	ASTM D955

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	105	105	ASTM D785
Tensile Strength at Break	49.0 MPa	7110 psi	ISO 527
	53.0 MPa	7690 psi	ASTM D638
Tensile Strength, Yield	46.0 MPa	6670 psi	ASTM D638
	47.0 MPa	6820 psi	ISO 527
Elongation at Break	210 %	210 %	ISO 527
	310 %	310 %	ASTM D638
Elongation at Yield	4.0 %	4.0 %	ISO 527
	5.0 %	5.0 %	ASTM D638
Flexural Strength	64.0 MPa	9280 psi	ISO 178
Flexural Yield Strength	67.0 MPa	9720 psi	ASTM D790
Flexural Modulus	1.75 GPa	254 ksi	ISO 178

Mechanical Properties	Metric Pa	English	Comments
Izod Impact, Notched	0.600 J/cm	1.12 ft-lb/in	ASTM D256
	@Temperature -40.0 °C	@Temperature -40.0 °F	
	3.70 J/cm	6.93 ft-lb/in	ASTM D256
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Izod Impact, Unnotched	NB	NB	ASTM D4812
	NB	NB	
	@Temperature -40.0 °C	@Temperature -40.0 °F	ASTM D4812
	6.30 kJ/m ²	3.00 ft-lb/in ²	
Izod Impact, Notched (ISO)	@Temperature -40.0 °C	@Temperature -40.0 °F	
	29.6 kJ/m ²	14.1 ft-lb/in ²	ISO 180
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	Puncture Energy	45.0 J	33.2 ft-lb
71.0 J		52.4 ft-lb	
	48.0 J	35.4 ft-lb	Puncture Resistance @ max load, 23°C; ISO 6603-2
	@Temperature -40.0 °C	@Temperature -40.0 °F	
	55.0 J	40.6 ft-lb	Puncture Resistance at Max Load; ASTM D3763
	@Temperature -40.0 °C	@Temperature -40.0 °F	
	55.0 J	40.6 ft-lb	Puncture Resistance at Max Load; ISO 6603-2
	@Temperature -40.0 °C	@Temperature -40.0 °F	

Thermal Properties	Metric	English	Comments
Deflection Temperature at 0.46 MPa (66 psi)	73.0 °C	163 °F	ISO 75
	73.0 °C	163 °F	
Deflection Temperature at 1.8 MPa (264 psi)	65.0 °C	149 °F	ISO 75
	65.0 °C	149 °F	

Optical Properties	Metric	English	Comments
Haze	0.30 %	0.30 %	ASTM D1003
Transmission, Visible	89 %	89 %	Regular Transmittance; ASTM D1003
	91 %	91 %	
			Total Transmittance; ASTM D1003

Processing Properties	Metric	English	Comments
Melt Temperature	250 - 290 °C	482 - 554 °F	
Mold Temperature	15.0 - 30.0 °C	59.0 - 86.0 °F	
Drying Temperature	70.0 °C	158 °F	
Dry Time	3 hour	3 hour	

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