

## **Eastman DURASTAR DS2010 Natural PCTA Copolyester**

Category: Polymer, Thermoplastic, Polyester, TP, PCTA Polyester Alloy, Polycyclohexylenedimethylene Terephthalate (PCT)

## **Material Notes:**

DURASTAR DS2010 polymer contains a mold release. It has excellent appearance and is nearly water-clear. Its most outstanding features are toughness, chemical resistance, and excellent processing characteristics. DS2010 has very good toughness as shown by Izod impact resistance. Exposure to aromatic oils often causes crazing or actual fracture of many polymer resins, but DS2010 maintains its physical properties when exposed to these oils, and its appearance is virtually unchanged. Easy to process, it flows readily and fills intricate molds. Under existing United States Food and Drug Administration (FDA) regulations, DURASTAR DS2010 may be used in food contact articles which comply with the specifications and conditions of use in 21 CFR 177.1240.Applications: Floor care; Furniture/Furniture trim; Housewares; Point of purchase displays; Toys/Sporting goods; Writing instruments Properties reported here are typical of average lots. Eastman makes no representation that the material in any particular shipment will conform exactly to the values given.Information provided by Eastman Chemical.

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_Eastman-DURASTAR-DS2010-Natural-PCTA-Copolyester.php

Physical Properties	Metric	English	Comments
Density	1.20 g/cc	0.0434 lb/in <sup>3</sup>	ASTM D792
Linear Mold Shrinkage, Flow	0.0040 cm/cm	0.0040 in/in	ASTM D955
	@Thickness 3.17 mm	@Thickness 0.125 in	A3 1M D933

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	105	105	ASTM D785
Tensile Strength, Ultimate	53.0 MPa	7690 psi	ASTM D638
Tensile Strength, Yield	46.0 MPa	6670 psi	ASTM D638
Elongation at Break	310 %	310 %	ASTM D638
Elongation at Yield	5.0 %	5.0 %	ASTM D638
Flexural Yield Strength	67.0 MPa	9720 psi	ASTM D790
Flexural Modulus	1.90 GPa	276 ksi	ASTM D790
Izod Impact, Notched	7.40 J/cm	13.9 ft-lb/in	ASTM D256
	0.600 J/cm	1.12 ft-lb/in	ASTM D256
	@Temperature -40.0 °C	@Temperature -40.0 °F	ACTIVIDES.

Thermal Properties	Metric	English	Comments
Deflection Temperature at 0.46 MPa			



Thermal Properties	73.0 °C Metric	163 F English	ASTM 0648 Comments	
Deflection Temperature at 1.8 MPa (264 psi)	65.0 °C	149 °F	ASTM D648	

Optical Properties	Metric	English	Comments
Haze	0.30 %	0.30 %	ASTM D1003
Transmission, Visible	89 %	89 %	Regular transmittance per ASTM D 1003
	91 %	91 %	Total Transmittance; ASTM D 1003

Processing Properties	Metric	English	Comments	
Melt Temperature	270 °C	518 °F		
Mold Temperature	22.5 °C	72.5 °F		
Drying Temperature	70.0 °C	158 °F		

## **Contact Songhan Plastic Technology Co.,Ltd.**

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