



Technical Data Sheet Drystar™ 0325 Copolyester

Applications

- Jars-skin care pkg
- Profiles

Product Description

Eastman is pleased to announce the launch of DRYSTAR* copolyesters. This new product-line is designed to meet the needs of converters seeking value-added solutions to their drying requirements of copolyesters. Eastman's copolyesters are highly valued for their excellent balance of properties such as superior aesthetics, impact strength, and chemical resistance. These properties can be optimally realized when the resins are properly dehydrated in accordance to recommended drying conditions and equipment.

Recognizing this value, Eastman conceived Drystar™ copolyesters to allow converters with limited access to desiccant dryers to achieve these optimizations. In addition, some converters with desiccant dryers may still find Drystar™ copolyesters value-adding to attain production flexibility and cost saving by removing the drying process prior to injection molding, profile extruding, or extrusion blow molding copolyesters. The initial launch comprises of the commercialization of four grades of Drystar™ copolyesters and Eastman has on-going program to extend this strategic product-line in the future.

Typical Properties

Property ^a	Test Method ^b	Typical Value, Units ^C		
General Properties				
Specific Gravity	D 792	1.27		
Mold Shrinkage				
Parallel to Flow, 3.2-mm (0.125-	D 955	0.002-0.005 mm/mm (0.002-0.005		
in.) thickness		in./in.)		
Mechanical Properties (ISO Method)				
Tensile Strength @ Yield	ISO 527	48 MPa		
Tensile Strength @ Break	ISO 527	29 MPa		
Elongation @ Yield	ISO 527	4 %		
Elongation @ Break	ISO 527	200 %		
Tensile Modulus	ISO 527	2000 MPa		
Flexural Modulus	ISO 178	2100 MPa		
Flexural Strength	ISO 178	67 MPa		
Izod Impact Strength, Notched				
@ 23°C	ISO 180	9.4 kJ/m ²		
@ -40°C	ISO 180	4.4 kJ/m ²		
Mechanical Properties				
Tensile Stress @ Break	D 638	30 MPa (4300 psi)		
Tensile Stress @ Yield	D 638	50 MPa (7200 psi)		
Elongation @ Break	D 638	180 %		
Elongation @ Yield	D 638	4.4 %		
Tensile Modulus	D 638	2030 MPa (2.9 x 10 ⁵ psi)		
Flexural Strength	D 790	68 MPa (9800 psi)		

^{*}DRYSTAR is only available in the Asia Pacific Region.

Rockwell Hardness, R Scale D 785 108	Flexural Modulus	D 790	2060 MPa (3.0 x 10 ⁵ psi)	
@ 23°C (73°F) D 256 105 J/m (1.9 ft·lbf/in.) @ -40°C (-40°F) D 256 40 J/m (0.7 ft·lbf/in.) Impact Strength, Unnotched 8 23°C (73°F) D 4812 NB @ -40°C (-40°F) D 4812 NB Optical Properties Haze D 1003 0.2 % Thermal Properties (ISO Method) Deflection Temperature @ 0.455 MPa (66 psi) ISO 75 70 °C @ 1.82 MPa (264 psi) ISO 75 62 °C Thermal Properties Deflection Temperature @ 0.455 MPa (66 psi) D 648 70 °C (158 °F) @ 1.82 MPa (264 psi) D 648 70 °C (158 °F) @ 1.82 MPa (264 psi) D 648 62 °C (143 °F) Typical Processing Conditions Drying Temperature ^d 71 °C (160 °F) Drying Time ^d 6 hrs Processing Melt Temperature	Rockwell Hardness, R Scale	D 785	108	
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Processing Melt Temperature 249-271 °C (480-520 °F)	Drying Temperature ^d		,	
15 20 20 (50 100 05)	Drying Time ^d		6 hrs	
Mold Temperature 16-38 °C (60-100 °F)	Processing Melt Temperature		249-271 °C (480-520 °F)	
	Mold Temperature		16-38 °C (60-100 °F)	

^aUnless noted otherwise, all tests are run at 23°C (73°F) and 50% relative humidity.

Comments

Properties reported here are based on limited testing. Eastman makes no representation that the material in any particular shipment will conform exactly to the values given. {TAB}

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^bUnless noted otherwise, the test method is ASTM.

^cUnits are in SI or US customary units.

^dDrying is only recommended for products previously opened and exposed to humid conditions.