

# Product Data Sheet

## *Drystar 0827 Copolyester*

### Application/Uses

- Injection molding

### 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.

\*DRYSTAR is only available in the Asia Pacific Region.

### Typical Properties (Preliminary)

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**General Properties**

Specific Gravity	D 792	1.27
Mold Shrinkage	D 955	0.002-0.005 mm/mm

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**Mechanical Properties**

Tensile Stress @ Yield	D 638	50 MPa (7200 psi)
Tensile Stress @ Break	D 638	25 MPa (3600 psi)
Elongation @ Yield	D 638	4%
Elongation @ Break	D 638	36%
Flexural Modulus	D 790	2200 MPa (3.2 x 10 <sup>5</sup> psi )
Flexural Strength	D 790	73 MPa (10500 psi)
Rockwell Hardness, R Scale	D 785	104
Izod Impact Strength, Notched		
@ 23°C (73°F)	D 256	85 J/m (1.5 ft·lbf/in.)
@ -40°C (-40°F)	D 256	39 J/m (0.7 ft·lbf/in.)
Impact Strength, Unnotched		
@ 23°C (73°F)	D 4812	NB
@ -40°C (-40°F)	D 4812	NB

Impact Resistance (Puncture), Energy @ Max. Load

@ 23°C (73°F)	D 3763	31 J (23 ft·lbf)
@ -40°C (-40°F)	D 3763	47 J (35 ft·lbf)

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### Thermal Properties

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Deflection Temperature		
@ 0.455 MPa (66 psi)	D 648	65°C (149°F)
@ 1.82 MPa (264 psi)	D 648	60°C (140°F)

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### Optical Properties

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Haze	D 1003	0.4%
Total Transmittance	D 1003	90%

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### Typical Processing Conditions

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Drying Temperature <sup>d</sup>	70°C (160°F)
Drying Time <sup>d</sup>	6 hrs
Processing Melt Temperature	249-271°C (480-520°F)
Mold Temperature	16-38°C (60-100°F)

### Comments

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

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