

**Product Texts**

Application/Uses

- Food packaging
- Housewares
- Toys/Sporting goods
- Writing instruments

Eastar EN001 Copolyester is a thermoplastic polyester copolymer. Eastar EN001 Copolyester has a relatively slow crystallization rate. This broadens the operating window for extrusion and forming processes and helps maintain good clarity when processing much thicker sheet. Eastar EN001 copolyester can also be used for injection molding applications. It is the preferred general-purpose crystallizable PET for thermoforming. Eastar EN001 copolyester is regulated for use in food packaging applications in accordance with US FDA Regulation 21 CFR 177.1315. It is lawful for use under US Department of Agriculture Food Safety Inspection Service regulations as a packaging material for meat or poultry food products prepared under federal inspection.

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ASTM Data</b>			
Density	1330	kg/m <sup>3</sup>	ASTM D 792

Mechanical properties	Value	Unit	Test Standard
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<b>ISO Data</b>			
Tensile Modulus	2400	MPa	ISO 527-1/-2
Yield stress	57	MPa	ISO 527-1/-2
Stress at break	25	MPa	ISO 527-1/-2
Strain at break	>50	%	ISO 527-1/-2
Puncture energy, +23°C	15	J	ISO 6603-2
Flexural modulus, 23°C	2300	MPa	ISO 178
Izod Impact notched, 23°C	4.5	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact notched	3.1	kJ/m <sup>2</sup>	ISO 180/1A
Temperature	-40	°C	-

<b>ASTM Data</b>			
Tensile Modulus	2413	MPa	ASTM D 638
Tensile Strength at Yield	57.9	MPa	ASTM D 638
Tensile Strength at Break	24.8	MPa	ASTM D 638
Elongation at Break	120	%	ASTM D 638
Flexural Modulus	2482	MPa	ASTM D 790
Rockwell Hardness	R112	-	ASTM D 785
Izod Impact notched, 1/8 in	0.04	kJ/m	ASTM D 256
Izod Impact notched, Low-Temperature	0.0272	kJ/m	ASTM D 256
Temperature	-40	°C	-

Thermal properties	Value	Unit	Test Standard
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<b>ISO Data</b>			
Temp. of deflection under load, 1.80 MPa	65	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	69	°C	ISO 75-1/-2
<b>ASTM Data</b>			
DTUL @ 66 psi	68.9	°C	ASTM D 648
DTUL @ 264 psi	65	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
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<b>ISO Data</b>			
Density	1330	kg/m <sup>3</sup>	ISO 1183

Optical properties	Value	Unit	Test Standard
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<b>ASTM Data</b>			
Haze	1	%	ASTM D 1003
Light Transmittance	84	%	ASTM D 1003

**Characteristics****Processing**

Injection Molding, Other Extrusion, Thermoforming

**Features**

Copolymer

**Certifications**

Food contact, Food approval FDA 21 CFR

**Applications**

General Purpose, Packaging, Sports Equipment

**Regional Availability**North America, Europe, Asia Pacific, South and Central America,  
Near East/Africa