

Eastman Eastar GN046 Copolyester, Natural

Category : Polymer , Thermoplastic , Polyester, TP , Polyethylene Terephthalate (PET) , Polyethylene Terephthalate (PET), Unreinforced

Material Notes:

Eastar Copolyester GN046 is a very high melt strength copolyester targeted for extrusion blow molding applications. Blow molding of large parts (up to several pounds) are possible with this material. This product is certified to ANSI/NSF Standard

51.Applications/UsesBottlesKey AttributesEffective barrier propertiesExcellent ClarityExcellent colorabilityGood stiffnessExcellent chemical resistanceToughnessEasy to extrude, cut, print, and sealHigh gloss appearanceGood impact strength

Order this product through the following link:

http://www.lookpolymers.com/polymer_Eastman-Eastar-GN046-Copolyester-Natural.php

| Physical Properties | Metric | English | Comments |
|-----------------------|---|--|-----------|
| Specific Gravity | 1.27 g/cc | 1.27 g/cc | ASTM D792 |
| Linear Mold Shrinkage | 0.0020 - 0.0050 cm/cm @Thickness 3.20 mm | 0.0020 - 0.0050 in/in @Thickness 0.126 in | ASTM D955 |

| Mechanical Properties | Metric | English | Comments |
|---------------------------|-------------------------------------|---|---|
| Hardness, Rockwell R | 108 | 108 | ASTM D785 |
| Tensile Strength at Break | 28.0 MPa | 4060 psi | ASTM D638 |
| Tensile Strength, Yield | 50.0 MPa | 7250 psi | ASTM D638 |
| Elongation at Break | 110 % | 110 % | ASTM D638 |
| Elongation at Yield | 4.0 % | 4.0 % | ASTM D638 |
| Flexural Strength | 68.0 MPa | 9860 psi | ASTM D790 |
| Flexural Modulus | 2.10 GPa | 305 ksi | ASTM D790 |
| Izod Impact, Notched | 0.530 J/cm @Temperature -40.0 °C | 0.993 ft-lb/in @Temperature -40.0 °F | ASTM D256 |
| | 0.940 J/cm @Temperature 23.0 °C | 1.76 ft-lb/in @Temperature 73.4 °F | ASTM D256 |
| Izod Impact, Unnotched | NB | NB | ASTM D4812 |
| | NB @Temperature -40.0 °C | NB @Temperature -40.0 °F | ASTM D4812 |
| Puncture Energy | 36.0 J | 26.6 ft-lb | Puncture Resistance @Max Load, 23°C; ASTM D3763 |
| | 35.0 J | 25.8 ft-lb | Puncture Resistance at Max Load; |

| Mechanical Properties | Metric @ Temperature -40.0 °C | English @ Temperature -40.0 °F | ASTM D3763 Comments |
|-----------------------|----------------------------------|-----------------------------------|------------------------|
|-----------------------|----------------------------------|-----------------------------------|------------------------|

| Thermal Properties | Metric | English | Comments |
|---|---------|---------|----------------------|
| Deflection Temperature at 0.46 MPa (66 psi) | 70.0 °C | 158 °F | ASTM D648 |
| Deflection Temperature at 1.8 MPa (264 psi) | 62.0 °C | 144 °F | ASTM D648 |
| Vicat Softening Point | 83.0 °C | 181 °F | 1kg load; ASTM D1525 |

| Optical Properties | Metric | English | Comments |
|-----------------------|--------|---------|-----------------------------------|
| Haze | 0.60 % | 0.60 % | ASTM D1003 |
| Gloss | 152 % | 152 % | at 60°; ASTM D2457 |
| Transmission, Visible | 87 % | 87 % | Regular Transmittance; ASTM D1003 |
| | 90 % | 90 % | Total Transmittance; ASTM D1003 |

| Processing Properties | Metric | English | Comments |
|-----------------------|----------------|---------------|----------|
| Melt Temperature | 249 - 271 °C | 480 - 520 °F | |
| Mold Temperature | 16.0 - 38.0 °C | 60.8 - 100 °F | |
| Drying Temperature | 71.0 °C | 160 °F | |
| Dry Time | 6 hour | 6 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