



Product Data Sheet

Eastar™ Copolyester EN010

Application/Uses

- Containers
- Injection molding
- Packaging

Product Description

Eastar[™] copolyester EN010 is used primarily in molded thick wall European applications.

This product has been GREENGUARD INDOOR AIR QUALITY CERTIFIED®.

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Typical Properties (Preliminary)

| Property ^a | Test ^b Method | Typical Value, Units ^c |
|---|-----------------------------|---------------------------------------|
| | | |
| Injection Molded Properties | | |
| Specific Gravity | D 792 | 1.33 |
| Mold Shrinkage Parallel to Flow, 3.2-mm (0.125-in.) thickness | D 955 | 0.003 mm/mm (0.003 in./in.) |
| Tensile Stress @ Yield | D 638 | 55 MPa (8000 psi) |
| Tensile Stress @ Break | D 638 | 30 MPa (4400 psi) |
| Elongation @ Yield | D 638 | 4% |
| Elongation @ Break | D 638 | 125% |
| Flexural Modulus | D 790 | 2440 MPa (3.5 x 10 ⁵ psi) |
| Flexural Yield Strength | D 790 | 76 MPa (11000 psi) |
| Rockwell Hardness, R Scale | D 785 | 112 |
| Izod Impact Strength, Notched | | |
| @ 23°C (73°F) | D 256 | 54 J/m (1.0 ft·lbf/in.) |
| @ -40°C (-40°F) | D 256 | 32 J/m (0.6 ft·lbf/in.) |

Impact Strength, Unnotched

| @ 23°C (73°F) | D 4812 | NB |
|------------------------|--------|----------------------------|
| @ -40°C (-40°F) | D 4812 | 2400 J/m (45.0 ft·lbf/in.) |
| Deflection Temperature | | |
| @ 0.455 MPa (66 psi) | D 648 | 69°C (156°F) |
| @ 1.82 MPa (264 psi) | D 648 | 60°C (140°F) |

| Typical Processing Conditions | |
|-------------------------------|-----------------------|
| Drying Temperature | 150-160°C (300-320°F) |
| Drying Time | 4-6 hrs |
| Processing Melt Temperature | 275-295°C (530-565°F) |
| Mold Temperature | 10-30°C (50-90°F) |

^a Unless 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.

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b Unless noted otherwise, the test method is ASTM.

c Units are in SI or US customary units.