

# Thermoforming guidelines Eastman TiGlaze<sup>™</sup> copolyester for architectural glazing

## Thermoforming guidelines

Product	Forming range °C (°F)	Ideal forming temp. <sup>a</sup> °C (°F)	Max. heat speed mm/sec (mil/sec)	Max. cool speed mm/sec (mil/sec)	Max. demolding temp. °C (°F)	Mold shrinkage mm (in.)	Type of mold required	Type of heating elements required	Type of oven required <sup>b</sup>
TiGlaze ST™ copolyester	135–157 (275–315)	149 (300)	0.05 (2.0)	0.05 (2.0)	63 (145)	0.10-0.15 (0.004-0.006)	Any	Any	Horizontal recommended

<sup>&</sup>lt;sup>a</sup>Maximum forming temperatures are taken as the temperature measured by an infrared temperature measurement device placed in the center of the top oven and measuring the temperature of the center of the top of the sheet sample. Temperatures will vary depending on how and where the temperature of the sheet is measured and depending on the thickness or gauge of the sheet.

- 1. Keep molds very clean. Eastman TiGlaze™ copolyester offers great part definition and is easy to thermoform.
- 2. Form Eastman TiGlaze<sup>™</sup> copolyester without drying the sheet.
- **3.** Best practice is to heat the sheet uniformly. Also allow the molded part to cool for a short time (5 seconds) prior to cooling with fans, if so equipped.
- **4.** Use a minimum draft angle of 5° in male molds for easy part release.
- 5. Allow for generous, internal corners (radius > sheet thickness) in part design to prevent breakage.

<sup>&</sup>lt;sup>b</sup>Horizontal thermoforming ovens are recommended when forming sheet manufactured from Eastman TiGlaze™ copolyester.

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