



Typical Properties and Processing Data

Typical Properties:

| | ASTM | EdgeGlas® 1000 | EdgeGlas® 5050 | EdgeGlas® 4065 |
|---------------------------------------|-------|------------------------|-----------------------|-----------------------|
| Specific Gravity | | 1.08 | 1.09 | 1.05 |
| Melt Flow at 230°C/3.8 kg | | 22 | 20 | 15 |
| Tensile Strength at Break | D638 | 8,000 psi (55.16 MPa) | 9,000 psi (62.05 MPa) | 6,500 psi (44.82 MPa) |
| Elongation at .030 mils | D638 | 6% | 5% | 10% |
| Tensile Modulus | D790 | | | 300,000 (2068 MPa) |
| Flexural Modulus | D790 | 500,000 psi (3447 MPa) | 550,000 (3792 MPa) | 270,000 (1862 MPa) |
| Unnotched Izod Impact | D256 | | | NB |
| HDT at 66 psi (0.45 MPa) - Unannealed | D648 | 225° F (107°C) | 240° F (116°C) | 230° F (110°C) |
| Annealed | D1525 | | | 275° F (135°C) |
| Light Transmission | | 90% | 90% | 90% |
| Mold Shrinkage | D955 | .003-.005 | .003-.005 | .004-.006 |
| FDA | | Compliant | Compliant | Compliant |

These are estimated typical properties of EdgeGlas® global high heat and outstanding ESCR resin. As EdgeGlas® is still considered experimental, it may be modified for processing or property improvement. The figures presented are believed to be accurate as tested by accepted laboratory practices. Because we cannot anticipate the conditions under which this material is processed and or tested, **no warranty is given**. Further development of this product is planned.

Processing Information:

Drying: Recommended 2 hours @ 150°-170°F (66-77°C) with dew point of -40°F (-40°C). For either Injection Molding or IBM:

| First Zone | Second Zone | Final Zone | Nozzle |
|----------------|----------------|----------------|------------------------|
| 435° F (224°C) | 445° F (229°C) | 455° F (235°C) | 435-455° F (224-235°C) |

** Please check melt temperature with a pyrometer, suggesting a final melt temperature range of 440° F to 460° F (227-238°C).**

Mold Temperature Range: 80 - 110°F (27 -43°C). If part sticking is experienced, increase that side of the mold sticking by 20 – 30°F (11 – 17°C).

Pressure: 1000 - 1300 psi (6.89 – 8.96 MPa) or process like a high-heat low-melt crystal polystyrene.

Other Processing Notes: Do not use a mixing head. Standard styrene screw is suggested. This new terpolymer resin normally will cycle faster than polyolefins by 10-20 %.