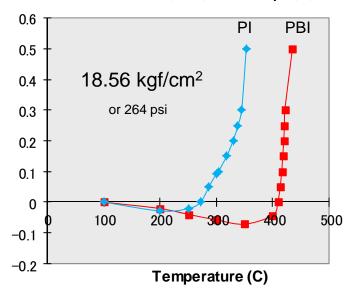


Celazole® PBI U-60

for Injection Molding Hot-runner Insulators

Dimensionally Stable under high heat and pressure

Heat Deflection (mm) vs. Temp. (C)

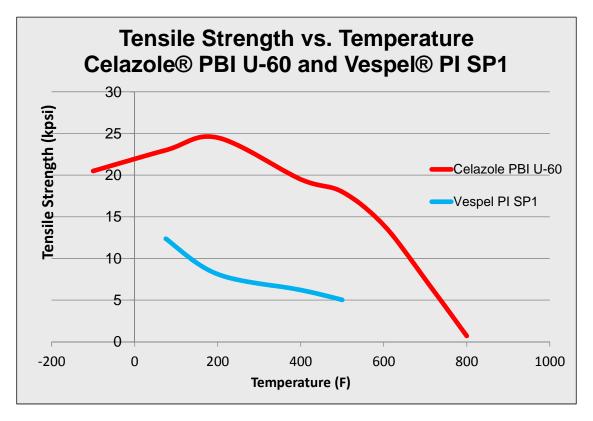


- PBI's superior thermal properties enable insulators to perform at high temperature and pressure while maintaining shape better than other materials.
- Compare the Heat Deflection Temperature (left) of Celazole PBI at 420C with Vespel PI at 330C.
- PBI has small dimensional changes across a broad thermal range. Compare the linear Coefficient of Thermal Expansion (CTE) of Celazole PBI at 2.3 um/m-K to Vespel PI at 5.4 um/m-K.
- A lower CTE means a better sealing and less leakage throughout the thermal range.

Great Thermal Insulation

- PBI is a great insulator. With a thermal conductivity of just 0.41 W/m-K (2.8 Btu/in²-hr-F), it keeps the heat in the molten resin.
- Since PBI will not melt, there is no worry about how hot your injection molding equipment gets.

High Strength



- PBI maintains it's strength when heated better than other plastics. Compare with Vespel PI (above).
- Eliminate cracks and breaks associated with weaker materials.
- Celazole PBI has the highest compressive strength of any unfilled plastic.
- Only very small hysterisis losses at 345 MPa (50,000 psi).