

# StyroCal™

Calcium Carbonate Concentrates for  
**Thermoforming Polystyrene**

- Significant Savings on Raw Material Costs
- Increased Productivity
- Improved Performance



### Significant savings on raw material costs

As much as \$0.02-\$0.06 per pound, depending on percentage of StyroCal used

### Improved Productivity

- Reduced cycle times
- Improved processability and formability

### Better part performance

- Increased stiffness
- Improved ESCR
- Reduced warpage
- Minimize shrink

### Productivity Gains

A major advantage of StyroCal™ concentrates are their ability to increase the thermal conductivity.

- > Addition of mineral enables faster sheet line speeds
- > Faster heating of sheet and part cooling after forming can be observed

### Physical Property Improvements

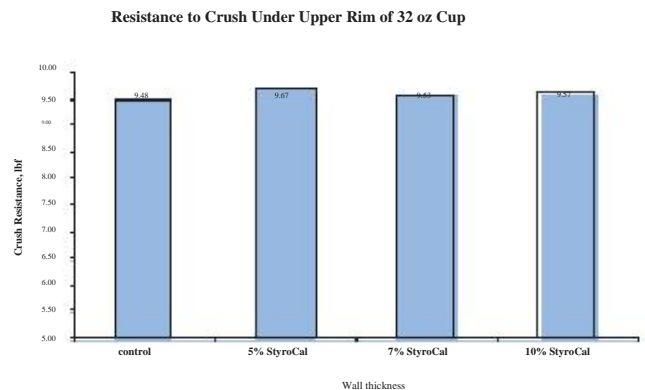
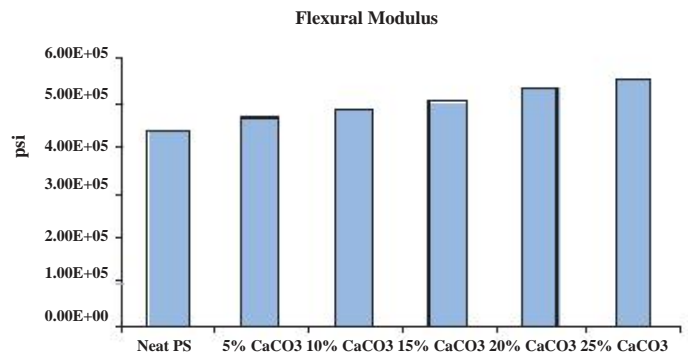
StyroCal™ will increase the final part density. To maximize cost savings, part weights should be maintained by reducing wall thickness from 4-8% depending on the level of StyroCal™ used.

### Product Description

**StyroCal™ HP** was specifically designed to provide significant material cost savings in polystyrene applications. StyroCal™ HP is 76% of fine ground, surface treated CaCO<sub>3</sub> in a specially selected polystyrene resin. StyroCal™ HP is designed to be added at 10- 30% loading levels to achieve an optimum balance between improvements in productivity and physical properties.

### What to Expect During Processing

1. No change in temperature profiles required
  - > Lower temperatures may provide optimum performance
2. Melt viscosity will tend to be lower as mineral affects melt rheology
  - > Lower extrusion amps and pressures often observed
3. Some initial purging may occur but abates; typically within 30 minutes
4. Appearance of pigmented parts will be relatively unaffected
  - > Un-pigmented products will appear uniformly white
  - > Colors may need reformulations (varying effects)



StyroCal™ is a registered trademark of Heritage Plastics, Inc.