

# Thermylene® P6-20FG-0684

## Polypropylene

Asahi Kasei Plastics North America Inc.

### General

Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber Reinforcement, 20% Filler by Weight
Additive	• Heat Stabilizer • UV Stabilizer
Features	• Heat Stabilized
Forms	• Pellets

Physical	Nominal Value Unit	Test Method
Specific Gravity	1.05 g/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR)	3.0 g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.50 %	ASTM D955

Mechanical	Nominal Value Unit	Test Method
Tensile Strength	69.6 MPa	ASTM D638
Tensile Elongation (Break)	3.5 %	ASTM D638
Flexural Modulus	3790 MPa	ASTM D790
Flexural Strength	96.5 MPa	ASTM D790

Impact	Nominal Value Unit	Test Method
Notched Izod Impact	75 J/m	ASTM D256

Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load 1.8 MPa, Unannealed	147 °C	ASTM D648

### Additional Information

Reinforcement Content, ASTM D5630: 20%

Injection	Nominal Value Unit
Drying Temperature	71.1 °C
Drying Time	2.0 hr
Suggested Max Moisture	0.15 %
Rear Temperature	193 to 204 °C
Middle Temperature	204 to 216 °C
Front Temperature	216 to 232 °C
Nozzle Temperature	221 to 238 °C
Mold Temperature	26.7 to 65.6 °C
Injection Pressure	82.7 to 110 MPa
Injection Rate	Moderate-Fast
Holding Pressure	68.9 to 103 MPa
Back Pressure	0.345 MPa

### Injection Notes

Screw Rpm: Normal  
Cooling Time: Short  
Screw Type: General  
Slightly longer cycle times may be required to mold wall thicknesses over 1/4 inch.  
Slightly higher injection pressures and mold temperatures may be required to mold wall thicknesses below 0.100 inches (2.54 mm).

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.