

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
Features	• Heat Stabilized
Forms	• Pellets

Physical

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

Mechanical

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

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

Thermal

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%
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Injection

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

¹ Typical properties: these are not to be construed as specifications.