



HiPrene® H550

GS Caltex - Polypropylene Homopolymer

General Information

Product Description

HiPrene® H550 is a polypropylene homopolymer suitable for injection moulding. This material has excellent stiffness. Because of its good stiffness and thermal stability, it is suitable for household goods applications.

Features:

- Excellent Stiffness
- Good Thermal Stability

Typical Customer Applications:

- Household Goods

General

Features	• Good Thermal Stability	• High Stiffness	• Homopolymer
Uses	• Household Goods		
Processing Method	• Injection Molding		

Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity			
--	0.902	0.900 g/cm ³	ASTM D792
--	0.900 g/cm ³	0.900 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	11 g/10 min	11 g/10 min	ASTM D1238 ISO 1133
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength			
Yield	5370 psi	37.0 MPa	ASTM D638
Yield	5080 psi	35.0 MPa	ISO 527-2
Tensile Elongation			
Break	> 500 %	> 500 %	ASTM D638
Break, 73°F (23°C)	> 500 %	> 500 %	ISO 527-2
Flexural Modulus			
--	232000 psi	1600 MPa	ASTM D790
73°F (23°C)	225000 psi	1550 MPa	ISO 178
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			
73°F (23°C)	0.66 ft-lb/in	35 J/m	ASTM D256
73°F (23°C)	1.7 ft-lb/in ²	3.5 kJ/m ²	ISO 180
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Rockwell Hardness (R-Scale)	105	105	ASTM D785 ISO 2039-2

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Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			
66 psi (0.45 MPa), Unannealed	239 °F	115 °C	ASTM D648
66 psi (0.45 MPa), Unannealed	194 °F	90.0 °C	ISO 75-2/B

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Rear Temperature	374 to 410 °F	190 to 210 °C
Middle Temperature	392 to 428 °F	200 to 220 °C
Front Temperature	392 to 428 °F	200 to 220 °C
Nozzle Temperature	392 to 428 °F	200 to 220 °C
Mold Temperature	77 to 122 °F	25 to 50 °C
Injection Pressure	2900 to 10200 psi	20.0 to 70.0 MPa
Back Pressure	435 to 1450 psi	3.00 to 10.0 MPa