



# HiPrene® H710

## GS Caltex - Polypropylene Homopolymer

### General Information

#### Product Description

HiPrene® H710 is a low melt flow, polypropylene homopolymer suitable for thermoforming. This material has excellent stiffness. Because of its good stiffness it is suitable for thermoforming sheets.

Features:

- Excellent Stiffness

Typical Customer Applications:

- Sheet

#### General

Features	• High Stiffness	• Homopolymer	• Low Flow
Uses	• Sheet	• Thermoforming Applications	
Processing Method	• Injection Molding	• Thermoforming	

### Properties <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity			
--	0.902	0.900 g/cm <sup>3</sup>	ASTM D792
--	0.900 g/cm <sup>3</sup>	0.900 g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	0.70 g/10 min	0.70 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)	1.1 ft·lb/in	60 J/m	ASTM D256
73°F (23°C)	2.9 ft·lb/in <sup>2</sup>	6.0 kJ/m <sup>2</sup>	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	203 °F	95.0 °C	ISO 75-2/B

### Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Rear Temperature	410 to 446 °F	210 to 230 °C
Middle Temperature	428 to 464 °F	220 to 240 °C
Front Temperature	446 to 482 °F	230 to 250 °C
Nozzle Temperature	446 to 482 °F	230 to 250 °C
Mold Temperature	104 to 140 °F	40 to 60 °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