



HiPrene® M710

GS Caltex - Polypropylene Impact Copolymer

General Information

Product Description

HiPrene® M710 is a low melt flow, impact modified polypropylene suitable for sheet forming. Because of its good impact resistance and stretchability, it is suitable for food packaging containers and electronic component trays.

Features:

- Excellent Impact Resistance
- Good Stretchability

Typical Customer Applications:

- Food Packaging Container
- Electronic Component Tray

General

Additive	• Impact Modifier		
Features	• Good Stretchability • High Impact Resistance	• Impact Copolymer • Impact Modified	• Low Flow
Uses	• Electrical/Electronic Applications • Sheet • Food Containers • Trays		
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)	0.60 g/10 min	0.60 g/10 min	ASTM D1238 ISO 1133
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength			
Yield	4500 psi	31.0 MPa	ASTM D638
Yield	4210 psi	29.0 MPa	ISO 527-2
Tensile Elongation			
Break	> 400 %	> 400 %	ASTM D638
Break, 73°F (23°C)	> 400 %	> 400 %	ISO 527-2
Flexural Modulus			
--	239000 psi	1650 MPa	ASTM D790
73°F (23°C)	232000 psi	1600 MPa	ISO 178

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Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			
14°F (-10°C)	1.9 ft·lb/in	100 J/m	ASTM D256
73°F (23°C)	> 9.4 ft·lb/in	> 500 J/m	ASTM D256
14°F (-10°C)	3.8 ft·lb/in ²	8.0 kJ/m ²	ISO 180
73°F (23°C)	> 24 ft·lb/in ²	> 50 kJ/m ²	ISO 180
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Rockwell Hardness (R-Scale)	95	95	ASTM D785 ISO 2039-2
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			
66 psi (0.45 MPa), Unannealed	248 °F	120 °C	ASTM D648
66 psi (0.45 MPa), Unannealed	221 °F	105 °C	ISO 75-2/B

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Rear Temperature	428 to 464 °F	220 to 240 °C
Middle Temperature	446 to 482 °F	230 to 250 °C
Front Temperature	464 to 500 °F	240 to 260 °C
Nozzle Temperature	482 to 518 °F	250 to 270 °C
Mold Temperature	86 to 122 °F	30 to 50 °C
Injection Pressure	7250 to 11600 psi	50.0 to 80.0 MPa
Back Pressure	725 to 2900 psi	5.00 to 20.0 MPa