HiPrene® M560

GS Caltex - Polypropylene Impact Copolymer

General Information

Product Description

HiPrene® M560 is a high melt flow, impact modified polypropylene suitable for injection molding. This material has good flowability and is easy to process. Because of it's good flowability and impact resistance, it is suitable for home appliance components and battery cases

Features:

- Good Flowability
- Good Impact Resistance

Typical Customer Applications:

- Home Appliance Component
- Battery Case

General			
Additive	• Impact Modifier		
Features	• Good Flow • Good Impact Resistance	• Good Processability • Impact Copolymer	• Impact Modified
Uses	• Appliance Components	• Battery Cases	
Processing Method	• Injection Molding		

Properties [1]

Physical	Typical Value (English)		Typical Value (SI)		Test Method
Density / Specific Gravity					
--	0.902		0.900	g/cm³	ASTM D792
--	0.900	g/cm³	0.900	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	30	g/10 min	30	g/10 min	ASTM D1238 ISO 1133
Mechanical	**Typical Value (English)**		**Typical Value (SI)**		**Test Method**
Tensile Strength					
Yield	4350	psi	30.0	MPa	ASTM D638
Yield	4060	psi	28.0	MPa	ISO 527-2
Tensile Elongation					
Break	> 200	%	> 200	%	ASTM D638
Break, 73°F (23°C)	> 200	%	> 200	%	ISO 527-2
Flexural Modulus					
--	232000	psi	1600	MPa	ASTM D790
73°F (23°C)	218000	psi	1500	MPa	ISO 178

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Impact	Typical Value (English)		Typical Value (SI)		Test Method
Notched Izod Impact					
14°F (-10°C)	0.56	ft·lb/in	30	J/m	ASTM D256
73°F (23°C)	1.1	ft·lb/in	60	J/m	ASTM D256
14°F (-10°C)	1.4	ft·lb/in²	3.0	kJ/m²	ISO 180
73°F (23°C)	2.4	ft·lb/in²	5.0	kJ/m²	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	257	°F	125	°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	356 to 374	°F	180 to 190	°C
Middle Temperature	374 to 392	°F	190 to 200	°C
Front Temperature	392 to 410	°F	200 to 210	°C
Nozzle Temperature	392 to 410	°F	200 to 210	°C
Mold Temperature	104 to 122	°F	40 to 50	°C
Injection Pressure	2900 to 5800	psi	20.0 to 40.0	MPa
Back Pressure	725 to 1450	psi	5.00 to 10.0	MPa