



HiPrene® H430

GS Caltex - Polypropylene Homopolymer

General Information

Product Description

HiPrene® H430 is a low melt flow, polypropylene homopolymer suitable for fiber fabrications. This material has excellent tensile strength and stretchability. Because of its good tensile properties, it is suitable for fiber/yarn applications.

Features:

- Good Tensile Strength
- Good Stretchability

Typical Customer Applications:

- Band
- Rope
- Fishnet

General

Features	<ul style="list-style-type: none"> • Good Stretchability • High Tensile Strength 	<ul style="list-style-type: none"> • Homopolymer • Low Flow
Uses	<ul style="list-style-type: none"> • Fibers 	<ul style="list-style-type: none"> • Netting • Yarn
Processing Method	<ul style="list-style-type: none"> • 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)	3.5 g/10 min	3.5 g/10 min	ASTM D1238 ISO 1133
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength			
Yield	5220 psi	36.0 MPa	ASTM D638
Yield	4930 psi	34.0 MPa	ISO 527-2
Tensile Elongation			
Break	> 500 %	> 500 %	ASTM D638
Break, 73°F (23°C)	> 500 %	> 500 %	ISO 527-2
Flexural Modulus			
--	218000 psi	1500 MPa	ASTM D790
73°F (23°C)	210000 psi	1450 MPa	ISO 178
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			
73°F (23°C)	0.75 ft·lb/in	40 J/m	ASTM D256
73°F (23°C)	1.9 ft·lb/in ²	4.0 kJ/m ²	ISO 180

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Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Rockwell Hardness (R-Scale)	105	105	ASTM D785 ISO 2039-2
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	410 to 446 °F	210 to 230 °C
Nozzle Temperature	410 to 446 °F	210 to 230 °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