



Geon™ CPVC MC280

Chlorinated Polyvinyl Chloride

Key Characteristics

Product Description

The Geon MC280 CPVC is an injection molding fittings compound for Industrial Pipe applications where enhanced resistance at elevated temperatures is needed. It is listed under NSF Std 14 and 61. Geon MC280 demonstrates superior processability and excellent thermal stability.

General

Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Uses	• Fittings • Industrial Applications		
Agency Ratings	• NSF STD-14	• NSF STD-61	• UL 94 ¹
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties²

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.49	1.49	ASTM D792
Spiral Flow	17.0 in	43.2 cm	Internal Method
PVC Cell Classification	23447	23447	ASTM D1784
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ³			ASTM D638
73°F (23°C), 0.125 in (3.18 mm)	425000 psi	2930 MPa	
Tensile Strength ³			ASTM D638
Yield, 73°F (23°C), 0.125 in (3.18 mm)	8200 psi	56.5 MPa	
Flexural Modulus	490000 psi	3380 MPa	ASTM D790
Flexural Strength (Yield)	15000 psi	103 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact			ASTM D256
73°F (23°C), 0.125 in (3.18 mm)	1.9 ft-lb/in	100 J/m	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Rockwell Hardness (R-Scale)	117	117	ASTM D785
Durometer Hardness			ASTM D2240
Shore D, 73°F (23°C), 0.125 in (3.18 mm)	82	82	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Annealed	214 °F	101 °C	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	160 °F	71 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Processing (Melt) Temp	388 to 410 °F	198 to 210 °C

Notes

¹ Pass - Not Listed

² Typical values are not to be construed as specifications.

³ 0.20 in/min (5.1 mm/min)



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