



Geon™ CPVC MC270

Chlorinated Polyvinyl Chloride

Key Characteristics

Product Description

The Geon MC270 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 MC270 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	
PVC Cell Classification	23447	23447	ASTM D1784
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus (73°F (23°C))	425000 psi	2930 MPa	ASTM D638
Tensile Strength (Yield, 73°F (23°C))	8000 psi	55.2 MPa	ASTM D638
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 73°F (23°C), 0.125 in (3.18 mm)	1.9 ft-lb/in	100 J/m	ASTM D256
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Rockwell Hardness (R-Scale)	117	117	ASTM D785
Durometer Hardness Shore D, 73°F (23°C), 0.125 in (3.18 mm)	82	82	ASTM D2240
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load 264 psi (1.8 MPa), Annealed	214 °F	101 °C	ASTM D648

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.