



Geon™ CPVC EE105

Chlorinated Polyvinyl Chloride

Key Characteristics

Product Description

Geon EE105 CPVC is an extrusion grade rigid compound ideally suited for a variety of applications. EE105 offers excellent electrical properties, chemical resistance and is designed for applications where enhanced resistance at elevated temperatures is needed. EE105 demonstrates ease of processing with excellent thermal stability. All colors of EE105 are UL certified and are made with virgin materials.

General

Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Uses	• Profiles		
Forms	• Pellets		
Processing Method	• Extrusion		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.50	1.50	ASTM D792
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²			ASTM D638
73°F (23°C), 0.125 in (3.18 mm), Compression Molded	325000 psi	2240 MPa	
Tensile Strength ²			ASTM D638
Yield, 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	7500 psi	51.7 MPa	
Tensile Elongation ²			ASTM D638
Break, 73°F (23°C), 0.125 in (3.18 mm)	24 %	24 %	
Flexural Modulus			ASTM D790
73°F (23°C), 0.125 in (3.18 mm)	350000 psi	2410 MPa	
Flexural Strength			ASTM D790
73°F (23°C), 0.125 in (3.18 mm)	11000 psi	75.8 MPa	
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Drop Impact Resistance ³ (73°F (23°C))	1.50 in-lb/mil	66.7 J/cm	ASTM D4226
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness			ASTM D2240
Shore D, 15 sec, 0.125 in (3.18 mm)	80	80	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Annealed, 0.125 in (3.18 mm)	232 °F	111 °C	
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Annealed, 0.125 in (3.18 mm)	221 °F	105 °C	
CLTE - Flow	4.0E-5 in/in/°F	7.2E-5 cm/cm/°C	ASTM D696
RTI Elec			UL 746
0.0400 to 0.120 in (1.02 to 3.05 mm)	221 °F	105 °C	
RTI Imp			UL 746
0.0400 to 0.120 in (1.02 to 3.05 mm)	221 °F	105 °C	

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Thermal	Typical Value (English)	Typical Value (SI)	Test Method
RTI Str 0.0400 to 0.120 in (1.02 to 3.05 mm)	221 °F	105 °C	UL 746
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
High Amp Arc Ignition (HAI) 0.120 in (3.05 mm)	0.00	0.00	UL 746
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating			UL 94
> 0.0400 in (> 1.02 mm)	V-0	V-0	
> 0.0600 in (> 1.52 mm)	5VA	5VA	

Processing Information

Extrusion	Typical Value (English)	Typical Value (SI)
Melt Temperature	375 to 390 °F	191 to 199 °C

Notes

¹ Typical values are not to be construed as specifications.

² 2.0 in/min (51 mm/min)

³ Procedure A, C.125

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