Geon™ CPVC LC510

Chlorinated Polyvinyl Chloride

Key Characteristics

Product Description			
Geon LC510 CPVC is an extrusion grade rigid compound. LC510 offers excellent chemical resistance and is designed for applications where enhanced resistance at elevated temperatures is needed. LC510 demonstrates ease of processing with excellent thermal stability.			
General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Uses	• Profiles		
Forms	• Pellets		
Processing Method	• Extrusion		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / 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	327000 psi	2250 MPa	
Tensile Strength [2]			ASTM D638
Yield, 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	7700 psi	53.1 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)	353000 psi	2430 MPa	
Flexural Strength			ASTM D790
73°F (23°C), 0.125 in (3.18 mm)	11500 psi	79.3 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), Unannealed	222 °F	106 °C	
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), Unannealed, 0.125 in (3.18 mm)	199 °F	92.8 °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

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

Beyond Polymers.

Better Business Solutions. SM