



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 |
|---|-------------------------|--------------------|-------------|
| 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 |

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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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