# Geon™ Bold L5801

## Polyvinyl Chloride Alloy

### Key Characteristics

| Product Description | | | |
|---|---|---|---|
| PVC alloy for dark color capstock requiring premium weathering in both horizontal and vertical applications. May provide a wider processing window on traditional calibration tooling. Comes in low gloss. Best option for lower heat build-up in "jet black". | | | |
| **General** | | | |
| Material Status | • Commercial: Active | | |
| Regional Availability | • Africa & Middle East<br>• Asia Pacific | • Europe<br>• Latin America | • North America |
| Features | • Good Processability | • Low Gloss | • Weather Resistant |
| Uses | • Capstock<br>• Construction Applications | • Decorative Railing<br>• Windows & Doors | |
| Forms | • Cube | | |
| Processing Method | • Extrusion | | |

### Technical Properties [1]

| Physical | Typical Value (English) | Typical Value (SI) | Test Method |
|---|---|---|---|
| Specific Gravity | 1.28 | 1.28 | ASTM D792 |
| **Mechanical** | **Typical Value (English)** | **Typical Value (SI)** | **Test Method** |
| Tensile Modulus [2] | 323000 psi | 2230 MPa | ASTM D638 |
| Tensile Strength [2] (Yield) | 4580 psi | 31.6 MPa | ASTM D638 |
| Tensile Elongation [2] (Break) | 55 % | 55 % | ASTM D638 |
| Flexural Modulus [3] | 340000 psi | 2340 MPa | ASTM D790 |
| Flexural Strength [3] (Yield) | 11500 psi | 79.3 MPa | ASTM D790 |
| **Impact** | **Typical Value (English)** | **Typical Value (SI)** | **Test Method** |
| Notched Izod Impact | | | ASTM D256 |
| 0.125 in (3.18 mm), Compression Molded | 0.50 ft·lb/in | 27 J/m | |
| Drop Impact Resistance | | | ASTM D4226 |
| 73°F (23°C) [4] | 1.33 in·lb/mil | 59.2 J/cm | |
| 73°F (23°C) [5] | > 4.00 in·lb/mil | > 178 J/cm | |
| **Hardness** | **Typical Value (English)** | **Typical Value (SI)** | **Test Method** |
| Durometer Hardness (Shore D, 15 sec) | 79 | 79 | ASTM D2240 |
| **Thermal** | **Typical Value (English)** | **Typical Value (SI)** | **Test Method** |
| Deflection Temperature Under Load [6] | | | ASTM D648 |
| 66 psi (0.45 MPa), Annealed, 0.125 in (3.18 mm) | 141 °F | 60.7 °C | |
| Deflection Temperature Under Load [6] | | | ASTM D648 |
| 264 psi (1.8 MPa), Annealed, 0.125 in (3.18 mm) | 122 °F | 49.9 °C | |
| CLTE - Flow | 4.0E-5 in/in/°F | 7.2E-5 cm/cm/°C | ASTM D696 |

**Additional Information**

Physical properties based on Geon L4067TME2 LHB Black 2880.

## Processing Information

| Extrusion | Typical Value (English) | Typical Value (SI) |
|---|---|---|
| Melt Temperature | 300 to 350 °F | 149 to 177 °C |

**Extrusion Notes**

Melt flow, extrusion conditions and downstream calibration likely to be different than standard rigid PVC. Wet vacuum calibration is recommended but may also work on dry calibration.

### Notes

[1] Typical values are not to be construed as specifications.

[2] Type I, 0.20 in/min (5.1 mm/min)

[3] 2.0 in/min (51 mm/min)

[4] Procedure A, .125"

[5] Procedure B, .125"

[6] Conditioned at 50 deg.C

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