

SOMOS® GP Plus 14122

Somos® GP Plus 14122 is a low-viscosity stereolithography resin with an opaque white appearance. This material mirrors production plastics like ABS and PBT, making it an **ideal choice for virtually any applications**. Parts produced with Somos® GP Plus 14122 are **durable, accurate** and **water and moisture resistant**.

This material is ideal for functional prototypes, concept models and low volume production parts. Among the greatest advantages guaranteed by this material, we find: **extremely accurate; excellent humidity resistance; very durable**.

Mechanical Properties

| | Test Method | UV Postcure Metric | UV Postcure Imperial |
|-----------------------|-------------|--------------------|----------------------|
| Tensile Strength | ASTM D638M | 37 MPa | 5.4 ksi |
| Tensile Modulus | ASTM D638M | 2,510 MPa | 364 ksi |
| Elongation at Break | ASTM D638M | 7.5 % | 7.5 % |
| Flexural Strength | ASTM D790M | 67.3 MPa | 9.8 ksi |
| Flexural Modulus | ASTM D2240 | 10,000 MPa | 319 ksi |
| Izod Impact (Notched) | ASTM D256A | 26 J/m | 0.49 ft-lb/in |

Thermal / Electrical Properties

| | Test Method | UV Postcure Metric | UV Postcure Imperial |
|------------------------------------|---------------|--------------------|----------------------|
| C.T.E. - 40 – 0° C (- 40 – 32° F) | ASTM E831-05 | 63 µm/m° C | 35 µm/m° F |
| C.T.E. 0 – 50° C (32 – 122° F) | ASTM E831-05 | 89 µm/m° C | 49 µm/m° F |
| C.T.E. 50 – 100° (122 – 212° F) | ASTM E831-05 | 170 µm/m° C | 96 µm/m° F |
| C.T.E. 100 – 150° C (212 – 302° F) | ASTM E831-05 | 172 µm/m° C | 96 µm/m° F |
| Dielectric Constant 60 Hz | ASTM D150-98 | 3.8 | 3.8 |
| Dielectric Constant 1 KHz | ASTM D150-98 | 3.7 | 3.7 |
| Dielectric Constant 1 MHz | ASTM D150-98 | 3.4 | 3.4 |
| Dielectric Strength | ASTM D149-97A | 17.9 kV/mm | 454 V/mil |
| HDT @ 0.46 MPa (66 psi) | ASTM D648 | 46°C | 115°F |
| HDT @ 1.81 MPa (264 psi) | ASTM D648 | 41°C | 106°F |