

SLS MATERIAL SPECIFICATIONS

Nytek 1200 CF

Highlights

- Alluring, black appearance
- Resistance to extreme temperatures and wear
- Optimal reproduction of detail
- High stiffness, high tensile strength
- Electrostatically dissipative

Applications

- Underhood components
- Wind tunnel display models
- Well suited to applications which require superior thermal properties, with maximum performance and an extremely high SLS strength to weight ratio

TYPICAL PHYSICAL PROPERTIES

Property	Test Method	English	Metric
Color/Appearance	Visual	Dark Grey	Dark Grey
Density	ASTM D792	0.0387 lb/in ³	1.07 g/cm ³
Elongation at Break	ASTM D638	3.6%	3.6%
Flexural Modulus	ASTM D790	500,000 psi	3,447 MPa
Flexural Strength	ASTM D790	11,600 psi	80 MPa
Heat Deflection Temperature @ 264 psi	ASTM D648	228°F - 350°F	109°C- 177°C
Heat Deflection Temperature @ 66 psi	ASTM D648	342°F - 352°F	172°C - 178°C
Izod Impact Strength (method A, notched)	ASTM D256	1.02 ft-lb/in	54 J/m
Tensile Modulus	ASTM D638	420,000 psi	2,896 MPa
Tensile Strength	ASTM D638	4,000 - 9,500 psi	28 - 66 MPa
Coefficient of Thermal Expansion: 77°F-212°F (25°C-100°C)	ASTM E831	124.5 µin/in°F	224.1 µm/m°C
Coefficient of Thermal Expansion: 212°F-338°F (100°C-170°C)	ASTM E831	176.6 µin/in°F	317.9 µm/m°C
Volume Resistance	—	6.0E+02 - 7.8E+03 ohms-cm	—
Surface Resistance	—	2.9E+10 - 3.2E+10 ohms	—
Voltage Field	—	<50 volts	—

The material properties provided herein are for reference purposes only. Actual values may vary significantly as they are dramatically affected by part geometry and process parameters. Material specifications are subject to change with out notice.