

Accura[®] PEAK[™] Plastic



3DSYSTEMS[™]



Applications

- High temperature requirements
- Test of water and fluid handling components
- Wind tunnel models
- Master patterns
- Fixtures, gages and jigs

Features

- High stiffness
- Excellent accuracy
- Best in class moisture stability
- Elevated temperature resistance

Benefits

- Stable and rigid parts that withstand adverse environments.
- Outstanding stiffness for demanding applications.
- Ideal for parts requiring high thermal and moisture resistance.



Accura[®] PEAK[™] Plastic

For use with solid-state stereolithography (SLA[®]) Systems

Technical Data

Liquid Material

Measurement	Condition	Value
Appearance		Amber
Liquid Density	@ 25 °C (77 °F)	1.32 g/cm
Solid Density	@ 25 °C (77 °F)	1.36 g/cm ³
Viscosity	@ 30 °C (86 °F)	605 cps
Penetration Depth (Dp)*		5.6 mils
Critical Exposure (Ec)*		11.5 mJ/cm ²

Post-Cured Material

Measurement	Condition	Metric	U.S.
Tensile Strength	ASTM D 638	57 - 78 MPa	8,270 - 11,320 PSI
Tensile Modulus	ASTM D 638	4,220 - 4,790 MPa	612 - 695 KSI
Elongation at Break (%)	ASTM D 638	1.3 - 2.5 %	1.3 - 2.5 %
Flexural Strength	ASTM D 790	77 - 126 MPa	11,170 - 18,380 PSI
Flexural Modulus	ASTM D 790	4,180 - 4,790 MPa	606 - 695 KSI
Impact Strength (Izod Notched)	ASTM D 256	21.3 - 27.3 J/m	0.4 - 0.5 ft-lb/in
Heat Deflection	ASTM D648 @ 66 PSI @ 264 PSI	78 °C 59 °C	172 °F 138 °F
Heat Deflection (with 120 °C thermal postcure)	ASTM D648 @ 66 PSI @ 264 PSI	153 °C 124 °C	307 °F 255 °F
Co-Efficient of Thermal Expansion	ASTM E 831-93 TMA (T<T _g , 0-50 °C) TMA (T<T _g , 50-120 °C)	48 μm/m -°C 92 μm/m -°C	27 μin/in -°F 51 μin/in -°F
Glass Transition (T _g) with 120 °C thermal postcure	DMA, E''	104 °C 110 °C	219 °F 230 °F
Hardness, Shore D		86	86

* Dp/Ec values are the same on all solid-state laser SLA[®] Systems.



3D Systems Corporation
333 Three D Systems Circle
Rock Hill, SC 29730 U.S.A.

Tel: +1 803.326.4080
Toll-free: 800.889.2964
Fax: +1 803.324.8810

moreinfo@3dsystems.com
www.3dsystems.com
NASDAQ: TDSC

Warranty/Disclaimer: The performance characteristics of these products may vary according to product application, operating conditions, material combined with, or with end use. 3D Systems makes no warranties of any type, express or implied, including, but not limited to, the warranties of merchantability or fitness for a particular use.

© 2010 by 3D Systems, Inc. All rights reserved. Specifications subject to change without notice. 3D logo, Accura and SLA are registered trademarks of 3D Systems, Inc.