Accura® CeraMAX™

Unspecified

3D Systems

Message:

A rigid ceramic-reinforced composite with excellent thermal, moisture and abrasion resistance.
Applications
Heat and wear resistant components
Stiff/Rigid assemblies and prototypes
Composite Ceramic-like components
Aesthetic components for art and archival models
Moisture stable components
Automotive and aerospace applications
Features
A plastic-ceramic composite
High thermal resistance
Excellent abrasion resistance
Moisture resistant
Extremely rigid
Benefits
Aesthetically beautiful white parts
Withstand temperatures of up to 220°C
Models that can withstand wear in aggressive applications
Components can survive in adverse thermal environments
Components can be plated
Parts retain properties & dimensions for extended durations

General Information	
Features	Good Abrasion Resistance
	Good Dimensional Stability
	Good Stiffness
	Good Wear Resistance
	High Heat Resistance
	High Rigidity
	Moisture Resistant
	Platable
	Pleasing Surface Appearance
Uses	Aerospace Applications
	Automotive Applications
	Engineering Parts
	Modeling Material
	Prototyping
Appearance	Opaque
	White
Processing Method	3D Printing, Stereolithography

Physical	Nominal Value	Unit	
Density			
-- [1]	1.59	g/cm³	
-- [2]	1.62	g/cm³	
Viscosity (30°C)	1.50 to 2.00	Pa·s	
Critical Exposure	7.20	mJ/cm²	
Penetration Depth	144.8	µm	
Hardness	**Nominal Value**	**Unit**	
Durometer Hardness (Shore D)	89		
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	9460 to 9680	MPa	ASTM D638
Tensile Strength	78.0 to 87.0	MPa	ASTM D638
Tensile Elongation (Break)	1.0 to 1.5	%	ASTM D638
Flexural Modulus	8270 to 8370	MPa	ASTM D790
Flexural Strength	137 to 145	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact	15 to 18	J/m	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed [3]	220	°C	
0.45 MPa, Unannealed	148	°C	
1.8 MPa, Unannealed [4]	97.0	°C	
1.8 MPa, Unannealed	95.0	°C	
Glass Transition Temperature			DMA
--	108 to 110	°C	
-- [5]	112 to 114	°C	
CLTE - Flow			ASTM E831
25 to 57°C	3.1E-5	cm/cm/°C	
70 to 200°C	8.7E-5	cm/cm/°C	
NOTE			
1.	Liquid, 25°C		
2.	Solid, 25°C		
3.	Thermal Postcure 2 hr @ 120 °C		
4.	Thermal Postcure 2 hr @ 120 °C		
5.	Thermal Postcure @ 120 °C		

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China