ABSplus™ P430

Acrylonitrile Butadiene Styrene

Stratasys

Message:

Production-Grade Thermoplastic for Dimension 3D Printers
ABSplus is a true production-grade thermoplastic that is durable enough to perform virtually the same as production parts. When combined with Dimension 3D Printers, ABSplus is the ideal solution to printing 3D models in an office environment.

General Information			
Features	Durable		
Uses	Modeling Material		
UL File Number	E345258		
Appearance	Black		
	Blue		
	Dark Green		
	Dark Grey		
	Ivory		
	Orange		
	Red		
	White		
	Yellow		
Processing Method	3D Printing, Fused Filament Fabrication (FFF)		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.04	g/cm³	ASTM D792
Thickness - Layer Capability	177.8 to 330.2	µm	
Flexural Delamination	31.0	MPa	ASTM D790
Volume Resistance [1]	6.0E+13 to 3.0E+14	ohms	ASTM D257
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus [2] (3.18 mm)	2280	MPa	ASTM D638
Tensile Strength [3] (3.18 mm)	36.5	MPa	ASTM D638
Tensile Elongation [4] (Break, 3.18 mm)	3.0	%	ASTM D638
Flexural Modulus [5]	2210	MPa	ASTM D790
Flexural Strength [6]	52.4	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (23°C)	110	J/m	ASTM D256A
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed	95.6	°C	
1.8 MPa, Unannealed	82.2	°C	
Glass Transition Temperature	108	°C	DMA

CLTE - Flow	8.8E-5	cm/cm/°C	ASTM E831
Electrical	**Nominal Value**	**Unit**	**Test Method**
Dielectric Strength [7]			
-- [8]	0.10 to 0.32	kV/mm	ASTM D149
--	28	kV/mm	IEC 60112
Dielectric Constant [9]	2.60 to 2.90		ASTM D150
Dissipation Factor [10]	4.6E-3 to 5.3E-3		ASTM D150
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (2.29 mm)	HB		UL 94
NOTE			
1.	All Electrical Property values were generated from the average of test plaques built with default part density (sparse). Test plaques were 4.0 x 4.0 x 0.1 inches (102 x 102 x 2.5 mm) and were built both in the flat and vertical orientation. The range of values is mostly the result of the difference in properties of test plaques built in the flat vs. vertical orientation.		
2.	Type I, 5.1 mm/min		
3.	Type I, 5.1 mm/min		
4.	Type I, 5.1 mm/min		
5.	Method I (3 point load), 1.3 mm/min		
6.	Method I (3 point load), 1.3 mm/min		
7.	All Electrical Property values were generated from the average of test plaques built with default part density (sparse). Test plaques were 4.0 x 4.0 x 0.1 inches (102 x 102 x 2.5 mm) and were built both in the flat and vertical orientation. The range of values is mostly the result of the difference in properties of test plaques built in the flat vs. vertical orientation.		
8.	Method A (Short-Time)		
9.	All Electrical Property values were generated from the average of test plaques built with default part density (sparse). Test plaques were 4.0 x 4.0 x 0.1 inches (102 x 102 x 2.5 mm) and were built both in the flat and vertical orientation. The range of values is mostly the result of the difference in properties of test plaques built in the flat vs. vertical orientation.		

10.	All Electrical Property values were generated from the average of test plaques built with default part density (sparse). Test plaques were 4.0 x 4.0 x 0.1 inches (102 x 102 x 2.5 mm) and were built both in the flat and vertical orientation. The range of values is mostly the result of the difference in properties of test plaques built in the flat vs. vertical orientation.

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