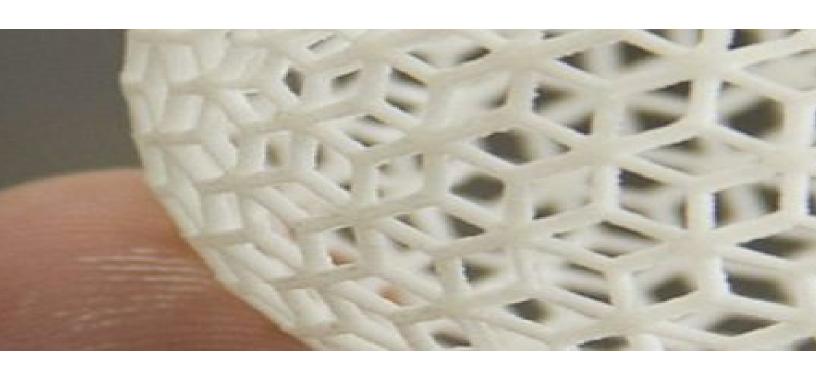


# Additive Inc - RAPID PROTOTYPING

## Professional 3D Printing - PC-ABS





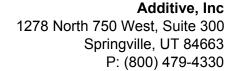
Additive, Inc 1278 North 750 West, Suite 300 Springville, UT 84663 P: (800) 479-4330

#### **About Us**

Additive, Inc is among leading rapid prototyping companies specializing in high quality FDM (Fused Deposition Modeling) and PolyJet rapid prototyping services. The FDM process is ideal for conceptual modeling, functional prototyping, manufacturing tools, and end-use-parts. While the PolyJet process will produce high quality and fine detailed prototypes. Whatever your rapid prototyper needs, Additive, Inc will be able to quickly produce your parts.

Get your parts FAST! We own and operate all of our FDM and PolyJet rapid prototyping services machines. This means we don't have to send your parts to a secondary service bureau and mark-up the price, making the process faster and more affordable for you.

Additive, Inc (among leading rapid prototyping companies) provides you or your company the tools for a fast, easy and affordable rapid prototyper.





## **PC-ABS**



PC-ABS (polycarbonate) is one of the most widely used industrial thermoplastics. PC-ABS offers the most desirable properties of both materials - the superior strength and heat resistance of PC and the flexibility of ABS.



## **Details**

MECHANICAL PROPERTIES	TEST METHOD	ENGLISH	METRIC
Tensile Strength (Type 1, 0.125", 0.2"/min)	ASTM D638	5,900 psi	41 MPa
Tensile Modulus (Type 1, 0.125", 0.2"/min)	ASTM D638	278,000 psi	1,900 MPa
Tensile Elongation (Type 1, 0.125", 0.2"/min)	ASTM D638	6%	6%
Flexural Strength (Method 1, 0.05"/min)	ASTM D790	9,800 psi	68 MPa
Flexural Modulus (Method 1, 0.05"/min)	ASTM D790	280,000 psi	1,900 MPa
IZOD Impact, notched (Method A, 23°C)	ASTM D256	3.7 ft-lb/in	196 J/m
IZOD Impact, un-notched (Method A, 23°C)	ASTM D256	9 ft-lb/in	481 J/m

THERMAL PROPERTIES	TEST METHOD	ENGLISH	METRIC
Heat Deflection(HDT)@ 66 psi, 0.125" unannealed	ASTM D648	230°F	110°C
Heat Deflection(HDT)@ 264 psi, 0.125" unannealed	ASTM D648	205°F	96°C
Vicat Softening Temperature	ASTM D1525	234°F	112°C
Glass Transition Temperature (Tg)	DMA (SSYS)	257°F	125°C



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Coefficient of Thermal Expansion	 4.10 E -05 in/in/°F	
Melt Point	 Not Applicable	Not Applicable

ELECTRICAL PROPERTIES	TEST METHOD	VALUE RANGE
Volume Resistivity	ASTM D257	2.0x10e14 - 4.4x10e13 ohms
Dielectric Constant	ASTM D150-98	2.9 - 2.7
Dissipation Factor	ASTM D150-98	.00350032
Dielectric Strength	ASTM D149-09, Method A	340 - 90 V/mm

OTHER	TEST METHOD	VALUE RANGE
Specific Gravity	ASTM D792	1.10
Density	ASTM D792	0.0397 lb/in3
Rockwell Hardness	ASTM D785	R110
UL File Number		E345258
Flame Classification	UL 94	НВ



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