

Physical Properties – AcrySpa™ Plus I-300+

Aristech Surfaces AcrySpa™ Plus is a composite engineered material which has the exceptional surface properties, weathering characteristics and aesthetics of Aristech Surfaces Opaque Continuous Cast Acrylic and a substrate that imparts outstanding impact resistance and thermoformability.

Property	Typical Values	Units	Test Method
General:			
Thickness	0.350 (8.88)	Inch (mm)	—
Specific Gravity	1.10	—	ASTM D-792
Mechanical:			
Tensile Strength	6,100 (42.1)	psi (MPa)	ASTM D-638
Tensile Modulus	350,000 (2,413)	psi (MPa)	ASTM D-638
Tensile Elongation	6.2	%	ASTM D-638
Flexural Strength	8,900 (61.4)	psi (MPa)	ASTM D-790
(Acrylic in Compression)			
Flexural Modulus	335,000 (2,310)	psi (MPa)	ASTM D-790
(Acrylic in Compression)			
Flexural Strength	10,700 (73.8)	psi (MPa)	ASTM D-790
(Acrylic in Tension)			
Flexural Modulus	323,000 (2.227)	psi (MPa)	ASTM D-790
(Acrylic in Tension)			
Notched Izod Impact	3.2 (16.8)	Ft.lbs./in.of notch (kJ/m ²)	ASTM D-256(Method A)
Falling Dart Impact	54 (73.2)*	Ft.lbs. (J)	FTMS 406-M-1074
Barcol Hardness	90-100	—	ASTM D-785
Rockwell Hardness (M)	48-52	—	ASTM D-2583
Thermal:			
Hot Forming Temperature			
(Acrylic Side)	350-380 (177-193)	°F (°C)	Aristech Method
(ABS Side)	300-340 (149-171)	°F (°C)	
Coefficient of Thermal Expansion	0.000043 (.000077)	in./in.°F (cm/cm°°C)	ASTM D-696
DTUL @ 264 psi(1.82 MPa)	193 (89.4)		
Flammability	94 HB	°F (°C)	ASTM D-648
		—	UL Test # 94
Miscellaneous:			
Water Absorption	0.20	%	ASTM D-570
Odor	None	—	—
Taste	None	—	—
50 Cycles Freeze-Thaw	No Effect	—	Aristech Method
-20 °F(-29°C) to 180 °F(82.2°C)			

* Actual value higher — This is the limit of the test apparatus.



Note: for cautions and information on exposure to any Aristech Surfaces' product, please see the applicable material safety data sheet.

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