ACRYSAN™

Physical Properties – AcrySan™ Plus I-300+

Aristech Surfaces AcrySan™ 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	0.160 (4.1)	Inch (mm)	—
Specific Gravity	1.085	—	ASTM D-792
Mechanical:			
Tensile Strength	6,600 (45.5)	psi (MPa)	ASTM D-638
Tensile Modulus	370,000 (2,551)	psi (MPa)	ASTM D-638
Tensile Elongation	4.4	%	ASTM D-638
Flexural Strength (Acrylic in Compression)	9,100 (62.7)	psi (MPa)	ASTM D-790
Flexural Modulus (Acrylic in Compression)	340,000 (2,344)	psi (MPa)	ASTM D-790
Flexural Strength (Acrylic in Tension)	10,800 (74.5)	psi (MPa)	ASTM D-790
Flexural Modulus (Acrylic in Tension)	326,000 (2,247)	psi (MPa)	ASTM D-790
Notched Izod Impact	2.1 (11.0)	Ft.lbs./in.of notch (kJ/m^2)	ASTM D-256(Method A)
Falling Dart Impact	12.3 (16.7)	Ft.lbs. (J)	FTMS 406 M-1074
Barcol Hardness	54	—	ASTM D-2583
Rockwell Hardness (M)	67	—	ASTM D-785
Thermal:			
Hot Forming Temperature			
(Acrylic Side)	350-380 (177-193)	°F (°C)	Aristech Method
(ABS Side)	300-340 (149-171)	°F (°C)	Aristech Method
Coefficient of Thermal Expansion	0.000047 (.000085)	in./in./ °F (cm/cm/°C)	ASTM D-696
DTUL @ 264 psi(1.82 MPa)	186.0 (85.6)	°F (°C)	ASTM D-648
Miscellaneous:			
Water Absorption	0.19	%	ASTM D-570
Gardner Gloss (60 Angle)	87.4	—	ASTM D-523
Odor	None	—	—
Taste	None	—	—