

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	9,100 (62.7)	psi (MPa)	ASTM D-790
(Acrylic in Compression)			
Flexural Modulus	340,000 (2,344)	psi (MPa)	ASTM D-790
(Acrylic in Compression)			
Flexural Strength	10,800 (74.5)	psi (MPa)	ASTM D-790
(Acrylic in Tension)			
Flexural Modulus	326,000 (2,247)	psi (MPa)	ASTM D-790
(Acrylic in Tension)			
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	—	—



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

*Information contained herein is: a) based on Aristech Surfaces' available technical data and experience; b) intended only for individuals having applicable technical skill, with such individuals assuming full responsibility for all design, fabrication, installation, and hazards; c) to be used with discretion and at one's own risk, after consultation with local codes and with one's independent determination that the product is suitable for the intended use; and d) not to be used to create designs, specifications, or installation guidelines. **Aristech Surfaces makes no representation, or warranty, express or implied, and assumes no liability or responsibility as to:** i) the accuracy, completeness or applicability of any supplied information; ii) results obtained from use of the information, whether or not resulting from Aristech Surfaces' negligence; iii) title, and/or non-infringement of third party intellectual property rights; iv) the merchantability, fitness or suitability of the product for any purpose; or v) health or safety hazards resulting from exposure to or use of the product. **Aristech Surfaces shall not be liable for** x) any damages, including claims relating to the specification, design, fabrication, installation, or combination of this product with any other product(s), and y) special, direct, indirect or consequential damages.*

