

TECHNICAL BULLETIN #208

Physical Properties - Studio Solid Surfacing Sheets

Aristech Surfaces' Studio Collection "Specialty Blend" polyester sheet products in a variety of attractive colors and patterns provide strong, non-porous, scratch and stain resistant material for architectural designs.

PROPERTY	UNITS	GLASS / TRANSLUCENT	RECYCLED / NON- TRANSLUCENT	Test method
General				
Nominal Thickness	mm	12mm	12mm	-
Density	g/cm ³	1.30	1.60	ASTM D 792
Water Absorption	%	0.04	0.05	ASTM D 570
Mechanical				
Tensile Strength	psi	2,300	3,300	ASTM D 638
Tensile Modulus	psi	660,000	1,039,000	ASTM D 638
Tensile Elongation	%	0.34	0.65	ASTM D 638
Flexural Strength	psi	4,100	5,570	ASTM D 790
Flexural Modulus	psi	655,000	976,000	ASTM D 790
Barcol Hardness	-	48	53	ASTM D 2583
Rockwell Hardness (M Scale)	-	104	98	ASTM D 785
Charpy Impact	ft-lbs/inch	0.50	0.70	ASTM D 6110
Ball Impact (½ lb. ball, no failure) Supported	Inches	>150	>150	NEMA LD3-3.8
Ball Impact (½ lb. ball, no failure) Un-supported	Inches	54	96	NEMA LD3-3.8
Thermal				
DTUL @ 264 psi	°F	161	170	ASTM D 648
Coefficient of Thermal Expansion	in/in/°F	2.9x10 ⁻⁵	2.1x10 ⁻⁵	ASTM D 696
Boiling Water Resistance	-	No Effect	No Effect	ISFA 2-01
High Temperature Resistance	-	No Effect	No Effect	ISFA 2-01
Flame Spread Index Smoke Generation Index	-	180 >450*	20 155	ASTM E 84 ASTM E 84
Combustion Toxicity	-	19.3	62.3	Pittsburgh Protocol
Total volotile Orgainc Compounds	μg/m²/hr	13.9	3.9	ASTM D 5116

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Surface				
Consistency Of Color (Same Sheet)	-	Passes	Passes	ISFA 2-01
Light Resistance	-	No Effect	No Effect	ISFA 2-01
Cleanability/Stain Resistance	-	Passes	Passes	NEMA LD3-3.4
Stain Resistance	-	Passes	Passes	ANZI/ICPA SS-1
Bacterial Resistance	-	No growth	No growth	ASTM G 22
Fungi Resistance	-	No growth	No growth	ASTM G 21
Food Zone Use	-	Approved	Approved	NSF 51

(*) Accepted as having interior finish usage, Class C, per New York City Admin Code 27-131; MEA 142-96-M. Test on file.

For cautions and other information relating to handling of an exposure to this product, please see the applicable material safety data sheet published by Aristech Surfaces

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