

UltraGlass AX & FX

Technical information

Characteristics	Value	Unit	Test method
PHYSICAL PROPERTIES			
Specific Gravity	1.19	-	ASTM D792
water absorption 23°C, 24hr	0.30	%	ASTM D570
Refractive Index	1.49	-	ASTM D542
OPTICAL PROPERTIES			
Transmittance	92	%	ASTM D1003
Yellowness	1.5	YI	ASTM D1925
MECHANICAL PROPERTIES			
Tensile Strength	10383	psi	ASTM D790
Elongation	2.0~4.0	%	ASTM D638
Flexural Strength	15645	psi	ASTM D790
Flexural Modules	497817	psi	ASTM D790
Compressive Strength	880	kg/cm ²	ASTM D695
Izod Impact Strength @3mm	16.0(P)	t- lbs/in	ASTM D256
Rockwell Hardness	115	R Scale	ASTM D785
THERMAL PROPERTIES			
load-deformation temperature	(@1.820 Mpa) (@0.455 Mpa)	204 221	°F ASTM D648
Coefficient Of Thermal Expansion	3.75x10 ⁻⁵	in/in/°F	
Flammability	HB	-	UL 94
MAR RESISTANCE			
Film Hardness By Pencil Test (Mitsubishi Pencil)	6H	-	ASTM D3363-05
Abrasion Resistance	43	mg	ISO 9352 : 2012('2)

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Test		Method	Product Limits	UV Hard Coated
Resistance to Immersion In Boiling Water	Mass	AS/NZS 2924.2 Part 7	Max 3%	0.7
	Thickness		Max 3%	0
	Appearance		Min Rating 4	4
Resistance To Steam		AS/NZS 2924.2 Part 23	Min Rating 4	4
Resistance to Staining	Acetone	50 double rubs	No Effect	no effect
	BAM	10 min exposure		
	Spray & wipe			
	Pine o clean			
	Windex			
	Windex shower			
	Coffee			
	Mr Muscle caustic oven cleaner			
	Mr Muscle non-caustic oven cleaner			
	25% NaOH			
	30% Hydrogen peroxide			
	30% Acetic acid			
	5% Bleach			
	Iodine			
	Shoe polish			
	Hair dye			
	Ant rid (Boric acid)			
	10% Citric acid-hot pot			
Pencil Hardness		EN 13523-4	Target 1-2H	>6H
Resistance to Scratching		AS/NZS 2924.2 Part 14	> 1.0 N	1.1
Resistance to Scratching		Dur-o-pen	Min 4 N	11
Gloss Measurement at 60°	Glass AX	AS/NZS 1580.602.2:1995	Min 90	> 85
	Glass FX			< 9
Resistance to Colour Change in Xenon Arc Light		AS/NZS 2924.2 Part 16	Min Rating 4 (Grey Scale)	5
Mar Resistance (CS-10)		ASTM D 6037	Max-35% loss of gloss	-12.1