

PHYSICAL PROPERTIES

PROPERTY	TEST	TYPICAL RESULT
Density	ASTM D792	1.7 g/cm ³
Approximate weight per square meter 6 mm (¼ ")		11.07 kg
Approximate weight per square meter 12 mm (½ ")		22.14 kg
Thermal Expansion	ASTM E228	3.9 x 10 ⁻⁵ m/m°C
Hardness- Rockwell "M" Scale	ASTM D785	>85
Hardness- Barcol Impressor	ISO 19712-2 (ASTM D2583)	56 to 65

MECHANICAL PROPERTIES

PROPERTY	TEST	TYPICAL RESULT
Flexural Modules	ASTM D790	8.27 GPa
Flexural Strength		68 MPa
Tensile Modules		10.34 GPa
Tensile Strength	ASTM D638	41.37 MPa
Tensile Elongation		Min. %0.4
Compressive Strength	ASTM C365	110.32 MPa

FITNESS FOR USE

PROPERTY	TEST	TYPICAL RESULT
Light Resistance (Xenon Arc)	ISO 19712-2	Pass
Weatherability	ASTM G155	ΔE*94<5 in 1000 hrs
Ball Impact Resistance: Sheets No fracture- 0.23 kg ball-6 mm	NEMA LD 3-3.8	0.86 m (No failure at height)
Ball Impact Resistance: Sheets No fracture- 0.23 kg ball-12 mm		0.36 m (No failure at height)
Wear and Cleanability	CSA B45.5-11/	Pass
Stain Resistance	IAPMO Z124-2011	Pass
Stain/chemical-resistance test		Pass
Resistance to cigarette burns		Pass
Resistance to dry heat		Pass
Resistance to wet heat	ISO 19712-2	Pass
Hot/cold cycle water- resistance test		Pass
Load test		Pass

FITNESS FOR USE (continued)

PROPERTY	TEST	TYPICAL RESULT
Dimensional stability	ISO 4586-2	Pass
Resistance to surface wear		0.18 % wt/25 revolutions
Fungal Resistance	ASTM G21	ASTM Rating of 0, No observed growth on product at 100x power
Bacterial Resistance	ASTM G22	No observed growth on product at 100x power
Microbial Resistance	UL 2824 (ASTM D6329)	Highly resistant to mold growth
Coefficient of Friction (Slip Resistance)	ASTM C1028	0.94-0.95 (matte finish under dry conditions) 0.50-0.64 (matte finish under wet conditions)
Boiling Water Resistance	NEMA LD 3-3.5	No visible change
High Temperature Resistance	NEMA LD 3-3.6	No change
Flammability, Surface Burning Characteristics of Building Materials	NFPA 101: Life Safety Code	Class A
Flame Spread Index Surface Burning Characteristics of Building Materials	ANSI/UL 723 (ASTM E84, NFPA 255)	Flame Spread Index (FSI)<25
Smoke Developed Index Surface Burning Characteristics of Building Materials	ANSI/UL 723 (ASTM E84, NFPA 255)	Smoke Developed Index (SDI)<25
Flame Spread Surface Burning Characteristics of Flooring, Floor Covering, and Miscellaneous Materials	CAN/ULC-S102.2	Flame Spread Value 0
Smoke Developed. Surface Burning Characteristics of Flooring, Floor Covering, and Miscellaneous Materials	CAN/ULC-S102.2	Smoke Developed Value 5
Colour Stability	D65-10 Test Method	$\Delta E < 1,0$

Typical results for 12 mm solid colors unless gauge is specified. Properties may vary by aesthetic. These values are not intended for engineering calculations. If precise calculations are required contact Neogen Solid Surface for additional information.