



Technical data sheet

S73 series

Mechanical Properties			
Test	Standard	Unit	Result
Flexural Strength	EN 14617-2	Mpa	45,5 , F4
	ASTM D790	Mpa	41,7
Breaking Strength	ASTM C648	lbf	363
Bond Strength	ASTM C482	-	3780 N ; 0,009216 m ² ; 0,41 MPa
Impact Resistance	EN 14617-9	J	3,73
	NEMA LD 3-3.8	inch	15,75 (224 g steel bar with 1-1/2" diameter)
Abrasion Resistance	EN 14617-4	mm	18,41 , A4
	ASTM C1353	lw	528,61

Physical Properties			
Test	Standard	Unit	Result
Dimensional Stability	EN 14617-12	-	Class A : Stable and not sensitive to humidity
Water Absorption	EN 14617-1	%	0,20 , W3
	ASTM C97	%	0,072
Apparent Density	EN 14617-1	Kg/m ³	2017,85
Bulk Specific Gravity	ASTM C97	-	2,018
Freeze-Thaw Resistance Coefficient	EN 14617-5	-	106,5
	ASTM C1026	ΔW (%)	0,0386 , Passed

Thermal Properties			
Test	Standard	Unit	Result
High Temperature Resistance	EN 12722 *	At 180 °C	Class: 4
	NEMA LD 3-3.6	At 180 °C	No Effect
Boiling Water Resistance	EN 12721 *	At 100 °C	Class: 3
	NEMA LD 3-3.5	At 100 °C	Moderate Effect
Thermal Shock Resistance	EN 14617-6 (20 cycle)	%	Avg. Mass Change: 0,069% Avg.Flex. Str. Change: 33%
Linear Thermal Expansion Coeff.	EN 14617-11	10 ⁻⁶ /°C	18,12
	ASTM E228	10 ⁻⁶ /°C	18,36
Thermal Conductivity	EN 12664	W/m-K	2,07

Surface Resistance Properties					
Test	Determination	Standard	Unit	Result	
Stain Resistance	Contrasting Grout	ASTM C1378-04 **	-	NA	
	Carbon Lamp Black			NA	
	Waterproof Ink			A	
	Washable Ink			NA	
	Potassium Permanganate Solution			A	
	Methylene Blue Solution			A	
Chemical Resistance	Acetic Acid, 3% v/v	ASTM C650 **	-	NA	
	Acetic Acid, 10% v/v			A	
	Ammonium Chloride, 100 g/L			NA	
	Citric Acid Solution, 30 g/L			NA	
	Citric Acid Solution, 100 g/L			A	
	Lactic Acid, 5% v/v			NA	
	Phosphoric Acid, 3% v/v			NA	
	Phosphoric Acid, 10% v/v			NA	
	Sulfamic Acid, 30 g/L			NA	
	Sulfamic Acid, 100 g/L			A	
	HCL Solution			EN 14617-10	C4 (Both 20° & 60°)
	NaOH Solution				C1 in 20° & C2 in 60°

Slip Resistance			
Test	Standard	Unit	Result
Shod Ramp Test	EN 16165 - Annex B***	Degree	7,80 (eq. to R9 in DIN 51130.
Pendulum Test Value - Dry & Wet	EN 16165 - Annex C***	PTV	>36 (Low Slip Potential)
Dynamic Coefficient of Friction (DCOF)	ANSI A326.3***	-	0,59

Fire Classification			
Test	Standard	Unit	Result
Reaction to Fire	EN 13501-1	Class	B - s2 , d1
	ASTM E84	Class	A

* Tests were performed in Sustonable’s internal laboratories. All other tests were conducted by accredited third-party laboratories.
** NA: Not Affected , A: Affected.
*** Slip resistance tests were performed on matte surfaces of Sustonable.