

	Polyester resin					BIO-UV resin (Intertek)	Standard used
Product Group	GR 1	GR 2	GR 3	GR 4	GR 5	nvt	
Aggregate	QUARTZ	QUARTZ	QUARTZ	QUARTZ	QUARTZ	D-QUARTZ	
Max. dimensions of aggregates (mm)	0.3	0.6	1.2	2.5	4.0	nvt	
Apparent density (kg/liter or ton/m ³)	2.3	2.4	2.4	2.4	2.4		EN-14617-1
Water absorption (% in weight)	0.021	0.022	0.023	0.027	0.028		EN-14617-1
Flexural modulus (N/mm ² or MPa)	32.500	32.500	32.500	32.500	32.500		DIN EN ISO 178
Compressive strength (N/mm ² or MPa)	247	239	215	212	209		EN-14617-15
Flexural strength 20°C (N/mm ² or MPa)	74	60	57	54	50	62,5 (GR3)	EN-14617-2
Impact resistance (Joule)	9.0	7.0	5.5	3.0	3.0	8,21 (GR2)	EN-14617-9
Resistance to deep abrasion (mm)	30	29	28,5	27,5	27	28,5 (GR1)	EN-14617-4
Thermal shock							
Flexural resistance (AR %)	0.0						EN-14617-6
Loss in weight (Δm %)	0.0						
Freeze – thaw resistance (KM ₁₂₅)	0.99	0.99	0.99	0.98	0.98		EN-14617-5
Chemical resistance	Class C4: Resistant acid Bases: 1 Hours: 10-15% loss gloss 8 Hours: 20-30 % loss gloss					Class C4 Acid: -5/+10% Base (polished): 1hr: -10-15% 8hr: -20-30% Base (velvet): 1hr: -10% 8hr: -15%	EN-14617-10
Reaction to fire classes for building products excluding products of flooring and insulation of piping	Class A2 – s1, d0						EN-13501 – 1:2007 – TAB 1
Classes of reaction to fire for floorings	Class A2 _{fl} – s1						EN-13501 – 1:2007 – TAB 2
Linear thermal expansion (m/m ^{°K})	19.5 10 ⁻⁶	19.0 10 ⁻⁶	18.5 10 ⁻⁶	18.0 10 ⁻⁶	17.5 10 ⁻⁶		EN-14617-11
Dimensional stability	Class B					class A	EN-14617-12
Thermal conductivity (W/m °K)	1.3						EN-12664
Heat Capacity (J / gr °K)	0.88						
Heath deflection temp. (°C)	120						
Moh's hardness	5-7						EN 101
Content of residue monomer styrene	None						UNI 9179-88
Electrical resistivity (Ω.m)							
Surface resistivity	5.0....13.0 * 10 ¹²						EN-14617-13
Volume resistivity	5.0....10.0 * 10 ¹²						
Wet heat resistance (80°C)						pol: rating 4 velv: rating 4	EN 12721
Dry heat resistance (160°C ; 5 min en 20 min)						pol: rating 3 velv: rating 5	EN 438-2, method 16
Weathering (UV-resistance)						√	ISO 4892-2,method A, cycle 1 color :ASTM E1347 gloss: ISO 2813 (60°)
Hydrolysis							
7 days exposure to water of 80°C	ΔE: 6,94					ΔE: 3,05	