

VALIANT

QUARTZ

TECHNICAL SPECIFICATIONS

TEST ITEM	TEST METHODS	TEST RESULTS														
APPARENT DENSITY	EN 14617-1:2013	2.34 g/cm ³														
WATER ABSORPTION	EN 14617-1:2013	0.01%														
MOH'S HARDNESS	EN 101	7														
FLEXURAL STRENGTH	EN 14617-2:2016	42.2MPa														
SLIP RESISTANCE (POLISHED)	EN 14231:2003	SRV "dry": 62 SRV "wet": 17														
ABRASION RESISTANCE	EN 14617-4:2012	23.0mm														
THERMAL SHOCK RESISTANCE	EN 14617-6:2012	Mass loss:0.03% Appearance: No visible defects Flexural strength after thermal shock:44.2MPa Flexural strength loss: -4.7%														
IMPACT RESISTANCE	EN 14617-9:2005	11.22J														
LINEAR THERMAL EXPANSION COEFFICIENT	EN 14617-11:2005	23.5×10 ⁻⁶ /°C														
DIMENSIONAL STABILITY	EN 14617-12:2012	Class: A														
FROST AND THAW RESISTANCE	EN 14617-5:2012	Flexural strength after freeze and thaw resistance: 44.1MPa The change in flexural strength: 104.5%														
BREAKING LOAD AT DOWEL HOLE	EN 14617-8:2007	5660 N														
SURFACE RESISTIVITY	EN 14617-13:2015	1.56×10 ¹² Ω/sq														
VOLUME RESISTIVITY	EN 14617-13:2015	3.42×10 ¹³ Ω·cm														
THERMAL CONDUCTIVITY	EN 15285:2008 Section 4.2.10 & EN 12664:2001 Heat flow meter method	0.746W/(m·K)														
CHEMICAL RESISTANCE	EN 14617-10:2012	Rating: C ₄														
RESISTANCE TO CHEMICALS AND STAINING AGENTS	EN 14688.CLAUSE 5.5	<table border="1"> <thead> <tr> <th>STAINING AGENT</th> <th>CLEANING TEST</th> </tr> </thead> <tbody> <tr> <td>CH₃COOH (10% V/V)</td> <td>Removal</td> </tr> <tr> <td>NaOH (5% m/m)</td> <td>Removal</td> </tr> <tr> <td>C₂H₅OH (70% V/V)</td> <td>Removal</td> </tr> <tr> <td>NaOCl (5%)</td> <td>Removal</td> </tr> <tr> <td>METHYLENE BLUE (1% m/m)</td> <td>Removal</td> </tr> <tr> <td>NaCl(170 G/L)</td> <td>Removal</td> </tr> </tbody> </table>	STAINING AGENT	CLEANING TEST	CH ₃ COOH (10% V/V)	Removal	NaOH (5% m/m)	Removal	C ₂ H ₅ OH (70% V/V)	Removal	NaOCl (5%)	Removal	METHYLENE BLUE (1% m/m)	Removal	NaCl(170 G/L)	Removal
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RELEASE OF DANGER SUBSTANCES(REACH)	SGS In-House method- GZTC CHEM-TOP-092-01, GZTC CHEM-TOP-092-02, Analyzed by ICP-OES, UV-VIS, GC-MS, HPLC-DAD/MS and Colorimetric Method.	Pass														