

SCIENTIFIC INFORMATION

Grandio Flow – Technical Profile

Filler content w/w % (Vol%)	80,2 (65,7)	DIN 51081
Polymerization shrinkage	3,2%	dilatrometric*
3-Point Flexural Strength	141 MPa	ISO 4049
Modulus of elasticity	9500 MPa	ISO 4049
Depth of curing (500 mW/cm ²)	3,5 mm / 20 s	ISO 4049
Surface hardness (Micro-Vickers Hardness)	138 MHV	University of Rostock
Thermal expansion coefficient	28,9 [10 ⁻⁶ /K]	Fraunhofer Institute Würzburg
Shear bond strength on dentine (Solobond M)	29,4 MPa	University of Münster
Radiopacity	200 %Al	ISO 4049
Color stability	no discoloration	ISO 4049
Stability in daylight	meets standard	ISO 4049
Water solubility	< 0,3 µg/mm ³	ISO 4049
Water absorption	10 µg / mm ³	ISO 4049
ACTA three body abrasion (200.000 cycles)	32 µm	

The stated measurement values do not represent a specified value within the scope of the VOCO GmbH quality assurance system.

* analogous J.Prosthet. Dent. 1988; 59:297-300.