

GQ QUATTRO DISC MED ST TECHNICAL DATA SHEET

Revised September 2021

Percentage chemical composition (m/m)

white

ZrO ₂ + HfO ₂	94~95 %
Y ₂ O ₃	4.5~6 %
Al ₂ O ₃	<0.5 %
Others oxides	<0.5 %

preshaded

ZrO ₂ + HfO ₂ + Y ₂ O ₃	>98 %
Fe ₂ O ₃	<0.3 %
Pr ₂ O ₃	<0.2 %
Er ₂ O ₃	<1.0 %
Others oxides	<0.5 %

Physical and mechanical properties

	white	preshaded
Colour	white	preshaded
Density (after sintering)	6.08±0.01 g/cm ³	6.08±0.01 g/cm ³
Bending strength	1,200 Mpa	1,100 Mpa
Vickers hardness	12 GPa	12 GPa
CTE value (25–500 °C)	(10.5±1.0)×10 ⁻⁶ K ⁻¹	(10.5±1.0)×10 ⁻⁶ K ⁻¹
Chemical solubility (after sintering)	<100 µg/cm ²	<100 µg/cm ³
Accelerated aging surface monoclinic phase content	<15 %	<15 %
Sintering temperature	1,400–1,580 °C	1,400–1,580 °C
Translucency	43 %	43 %