

### Physical & Performance Characteristics

STANDARD	SECTION	FEAUTES - CHARACTERISTICS	REQUIREMENTS	EVIDENCE (Test Results)	TESTING COMPANY <sup>[1]</sup>
13356	4.1	density [according to ISO 18754 or EN 623-2]	≥ 6,00 [g/cm <sup>3</sup> ]	6,068	DMC-Laboratory
13356	4.3	microstructure: intercept distance [Test acc. to EN 623-3 or ASTM E112]	≤ 0,4 [µm]	0,35	FGK
13356	4.4	4 point bending strength	≥ 800 [MPa]	954	DMC-Laboratory
13356	4.6	cyclic fatigue limit stress	≥ 320 [MPa]	successful, no failure	Endolab
13356	4.7	radioactivity	≤ 200 [Bq/kg]	5,2	VKTA
6872	7.4	linear thermal expansion	determination [10 <sup>-6</sup> K <sup>-1</sup> ]	10	FGK
6872	7.6	chemical solubility	2.000 [µg · cm <sup>2</sup> ]	4	FGK

### Chemical Characteristics

STANDARD	SECTION	CHARACTERISTIC	ELEMENTS - OXIDES	REQUIREMENTS	EVIDENCE (Test Results)	TESTING COMPANY <sup>[1]</sup>
13356	4.2	composition [mass percentage]	ZrO <sub>2</sub> + HfO <sub>2</sub> + Y <sub>2</sub> O <sub>3</sub>	≥ 99,0	99,74	FGK
13356			Y <sub>2</sub> O	> 4,5 up to ≤ 6,0	5,46	FGK
13356			HfO <sub>2</sub>	≤ 5	1,88	FGK
13356			Al <sub>2</sub> O <sub>3</sub>	≤ 0,5	0,246	FGK
13356			other oxides	≤ 0,5	0,014	FGK

[\*] Accreditation certificate available on request

Registered notified body: TÜV SÜD Product Service GmbH **CE 0123**