

To whom it may concern

Certificate of analysis

1. Name of the product : GDSZ-3-001
2. Lot No. : 25F2233

Item	Unit	Specification	Analysis Result	Analysis Methods
ZrO ₂ + HfO ₂	%	94.10 ~ 94.50	94.32	XRF
Y ₂ O ₃	%	5.50 ~ 5.90	5.68	XRF
Al ₂ O ₃	%	0.20 ~ 0.30	0.25	XRF
Fe ₂ O ₃	%	0.01 max	0.001	ICP
TiO ₂	%	0.01 max	0.001	ICP
SiO ₂	%	0.02 max	0.004	ICP
CaO	%	0.02 max	0.001	ICP
Na ₂ O	%	0.01 max	0.002	AAS
H ₂ O	%	0.50 max	0.33	105°C × 2Hr
L.O.I. (H ₂ O Containing)	%	1.00 max	0.71	1000°C × 1Hr
Particle Size (D ₁₀)	μ m	Report	0.24	Laser Diffraction
Particle Size (D ₅₀)	μ m	Report	0.37	Laser Diffraction
Particle Size (D ₉₀)	μ m	Report	0.60	Laser Diffraction
Surface Area	m ² /g	Report	13.9	BET
Bulk Density	g/ml	Report	1.29	Bulk Density Meter
Green Density	g/cm ³	Report	2.74	CIP 1.0t/cm ²
Sintered Density	g/cm ³	Report	6.07	1350°C × 2Hr
Linear Shrinkage	%	Report	76.34	1350°C × 2Hr