

ZYTTRIA®	Z401 WHITE TRASLUCENT	Z402 EXTRA-TRASLUCENT PLUS	Z COLOR EXTRA-PLUS	Z MULTICOLOR EXTRA-PLUS	Z403 ANTERIOR	Z COLOR ANTERIOR	Z MULTICOLOR ANTERIOR	Z404 SUPER-TRASLUCENT	Z COLOR SUPER-TRASLUCENT	Z MULTICOLOR SUPER-TRASLUCENT
CHEMICAL FORMULA										
ZrO ₂ +HfO ₂	> 94.5%	> 94.2%	> 94%	>94%	>90.25%	>90%	>90%	>92.3%	>92%	>92%
Y ₂ O ₃	5.15% ± 0.2%	5.15% ± 0.2%	>5.15%	>5.2%	7.5-9.7%	7.5-9.7%	7.5-9.5%	6.7-7.8 %	6.7-7.8 %	6.7-7.8 %
Al ₂ O ₃	0.25%±0.1%	0.1%±0.02%	<0.1%	<0.1%	≤ 0.05%	≤ 0.05%	≤ 0.1%	<0.1%	<0.1%	<0.1%
SiO ₂	< 0.02%	< 0.01%	< 0.01%	≤0.01%	≤ 0.002%	≤ 0.002%	≤ 0.002%	≤ 0.005%	≤ 0.005%	≤ 0.005%
Fe ₂ O ₃	< 0.01%	< 0.01%	< 0.1%	<0.1%	≤ 0.002%	≤ 0.1%	≤ 0.1%	≤ 0.0001%	< 0.12%	< 0.12%
NaO ₂	< 0.04%	< 0.01%	< 0.04%	<0.04%	N.A.	N.A.	N.A.	≤ 0.04%	≤ 0.04%	≤ 0.04%
PHYSICAL PROPERTIES										
SINTERED DENSITY <i>Densità sinterizzato</i>	≥ 6.05 g/cm ³	> 6.06g/cm ³	> 6.05g/cm ³	≥6.05g/cm ³	> 6.04g/cm ³	≥6.05 g/cm ³	≥6.0 g/cm ³	≥6g/cm ³	≥6.03 g/cm ³	≥6.03 g/cm ³
WATER ABSORPTION <i>Assorbimento di acqua</i>	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
VICKERS HARDNESS <i>Durezza Wichers</i>	> 12.5 GPa	> 12.5 GPa	> 12.0 GPa	> 12.0 GPa	≥ 12.0 GPa	≥ 12.0 GPa	≥ 12.0 GPa	>12.0 GPa	>12.0 GPa	>12.0 GPa
POROSITY <i>Porosità</i>	0	0	0	0	0	0	0	0	0	0
COMPRESSIVE STRENGTH <i>Resistenza alla Compressione</i>	> 2100 MPa	> 2100 MPa	> 2100 MPa	> 2100 MPa	> 2100 MPa	> 2100 MPa	> 2100 MPa	> 2100 MPa	> 2100 MPa	> 2100 MPa
BENDING STRENGTH (3 PT.) <i>Resistenza alla Flessione (3 pt.)</i>	1200 MPa	1200 MPa	1200 MPa	1200-900 MPa	600 MPa	600 MPa	900-600 MPa	1000 MPa	1000 MPa	1000 MPa
YOUNG'S MODULUS <i>Modulo di Young</i>	200 GPa	200 GPa	200 GPa	210 GPa	210 GPa	210 GPa	210 GPa	210 GPa	210 GPa	210 GPa
FRACTURE TOUGHNESS (KIC) <i>Tenacità alla Frattura Mpa m^{1/2}</i>	9	>6	>6	>6	2.5	2.5	2.5	>5	>5	>5
THERMAL CONDUCTIVITY <i>Conducibilità Termica W/Mx°k (Kelvin)</i>	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
HEAT SHOCK (PRESINTERED) <i>Shock Termico (Presinterizzato)</i>	220°C	220°C	220°C	220°C	220°C	220°C	220°C	220°C	220°C	220°C
THERMAL EXPANSION COEFFICIENT <i>Coeff. Espansione Termica (*10 exp-6/°C) 20°C-800°C</i>	10.7	10.5	10.5	10.7	10.4	10.4	10.4	10.7	10.7	10.7
RADIOACTIVITY <i>Radioattività</i>	<0.015 Bq/g	<0.015 Bq/g	<0.015 Bq/g	<0.015 Bq/g	<0.015 Bq/g	<0.015 Bq/g	<0.015 Bq/g	<0.015 Bq/g	<0.015 Bq/g	<0.015 Bq/g
CYTOTOXICITY (ISO 10993/DIN EN ISO 9363) <i>Citotossicità</i>	Non-toxic	Non-toxic	Non-toxic	Non-toxic	Non-toxic	Non-toxic	Non-toxic	Non-toxic	Non-toxic	Non-toxic