

GQ METALLICAST NP

TECHNICAL DATA SHEET

Cobalt based dental alloy for ceramic, type 4

Percentage chemical composition (m/m)

Co	63 %
Cr	28 %
Nb	4 %
W	3 %
Si	1 %
Mn	<1 %
Fe	<1 %

Physical and mechanical properties

Alloy type	4
Colour	white
Density	8,4 g/cm ³
Solidus-liquidus temperature	1,253–1,304 °C
Melting point	1,360 °C
Yield load strenght (R _{p0,2})	475 MPa
Elongation at break	3 %
Young's modulus	194 GPa
Vickers hardness	324 HV10
CTE value (25–500 °C)	14,1 × 10 ⁻⁶ K ⁻¹
CTE value (25–600 °C)	14,5 × 10 ⁻⁶ K ⁻¹
Maximum baking temperature	980 °C
Ions release after 7 days	0.8 µg/cm ²
Cytotoxicity test according to ISO 10993-5	passed
Irritation test according to ISO 10993-10	passed
Subchronic toxicity test according to ISO 10993-11	passed