



initial

PHYSICAL PROPERTIES
GC Initial MC & LF & Ti & AL & Zr

PROPERTIES	MEASURE	INITIAL MC		INITIAL LF		INITIAL Ti		INITIAL AL		INITIAL Zr		NORM
1 st Dentine Firing	°C	890		770		780		910		810		
CTE / WAK (25-500°C)	Firings	2	4	2	4	2	4	2	4	2	4	
	10 ⁻⁶ ×K ⁻¹	13,1	13,3	11,6	11,8	8,6	8,6	6,9	6,9	9,4	9,4	
Glass Transforming temperature	°C	575		510		575		600		550		-
Solubility	µg/cm ²	25		15		11		11		12		Max. 100
Density	g/cm ²	2,52		2,48		2,45		2,41		2,43		-
Flexural Strength	MPa	84		80		70		70		70		Min. 50
Average Particle Size µm	D 50%	25		21,2		22,2		24,2		21,5		-
Bonding Strength	MPa	50		50		-		-		-		Min. 25
Ceramic Type	N=Nature S=Synthetic Glass	N/S		S		S		N/S		S		-

All technical / physical values provided here, refer to in-house testing.
Following EN ISO 9693 : 2000

initial MC
PRODUCT COMPOSITION



	PASTE OPAQUE PASTE OPAQUE MODIFIER	DENTINE(S) / OPAQUE DENTINE(S) ENAMEL(S) / ENAMEL INTENSIVE(S) TRANSLUCENT(S) / CERVICAL TRANSLUCENT(S) INSIDE(S) / SHOULDER POWDER(S)	INvivo / INsitu MC, LF GLAZE POWDER STAINS
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COMPONENT	AMOUNT IN WT. -%	AMOUNT IN WT. -%	AMOUNT IN WT. -%
Silicon Dioxide SiO ₂	22-27	55-65	70-75
Aluminum Oxide Al ₂ O ₃	5-9	10-15	-
Potassium Oxide K ₂ O	5-9	10-15	8-11
Sodium Oxide Na ₂ O	1-5	5-8	11-14
Lithium Oxide LiO ₂	<1	<1	-
Magnesium Oxide MgO	1-2	<1	-
Calcium Oxide CaO	0,1-1,0	1-2	2-5
Barium Oxide BaO	0,1-1,0	0-2	2-5
Boron Trioxide B ₂ O ₃	0-1	0,5-2	2-4
Titanium Dioxide TiO ₂	<1	<1	-
Zirconium Oxide ZrO ₂	17-23	<1	-
Phosphorus Pentoxide P ₂ O ₅	-	<1	-
Other Oxides (CeO ₂ , CeF ₃)	<1	<1	-
Tin Dioxide SnO ₂	3-5	-	-
Glycerin	16-18		
Natriumacetat NaOAc	<1		
Propandiol 1,2	9-11		
ZnCl ₂	<1		
Aerosil	1-2		