표지부분 - 도수: 5도 / 페이지 규격 : 199,5mm X 282mm / 제본 : 중철

C M Y K PANTONE 877C(silver)

CERAMAX

Directions for Use

Manufacturer

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2009.10.13 designed by Imotion

ALPHADENT

내지부분 - 도수: 5도 / 페이지 규격 : 199,5mm X 282mm

C M Y K PANTONE 877C(silver)

Device Name

Proprietary Name	CERAMAX®
Common Name	Dental Ceramic
Classification Name	Porcelain powder for clinical use

Indication for Use

CERAMAX is indicated for veneering of metal framework and copings for the preparation of crowns and bridges.

Contraindication

The application of CERAMAX is contraindicated if

- the coping of artificial teeth is made of ceramic materials.
- a crack occurred by compression or tension.
- a patient is likely to be allergic to any ingredients of dental ceramic.

Characteristics

Good Matching the CTE of Metal Frame

Safe from cracks worried in repeated firing and cooling.

Controlling Precisely Particle Size Distribution

Good workability of build-up.

Adding the Bonding Agents in Opaque Porcelain

Enhanced the bond strength of porcelain to metal.

Adding the Fluorescent Pigment

Improved esthetic nature of artificial teeth.

Recommended Alloys for CERAMAX

CERAMAX is recommended to be used in conjunction with alloys of which CTE (the coefficient of thermal expansion) is 13.8~14.3×10^{-6}/℃ (25~500℃). The CTE of porcelain can be adjusted by controlling the cooling time, and therefore it can be used with any alloys with CTE (25~500℃) up to 14.5×10^{-6}/℃

Contents

Description

CERAMAX is a dental material product composed of feldspar, quartz, oxides, carbonates and color pigments including fluorescent pigment. It consists of Opaque (including Powder opaque, Paste opaque and Opaque modifier), Dentine (including Dentine modifier and Opacious dentine), Enamel, Translucent, Cervical, Margin, Gum, Glaze and Stain. They are used by dental technicians for the preparation of crowns and bridges. It is used in prosthetic dentistry by heating the powder mixture to a high temperature in a furnace to produce a hard prosthesis with a glass-like finish.

Standard and Classification

(1) Applicable standard;

ISO6872: 2008 Dentistry - Ceramic materials

ISO9693: 1999 Metal-ceramic dental restorative systems

(2) Classification by ISO6872:2008; Type I, Class 1

According to clause 4 of ISO6872, Type I includes ceramic products which are provided as powders, pastes and aerosols, and Type II includes all other forms of ceramic products. All components of CERAMAX are included in ceramic products as powder and paste. Therefore, only Type I can apply to classify all components by ISO6872:2008. And CERAMAX belongs to Class 1 since it is the aesthetic ceramic for coverage of a metal substructure.

Color Combination Chart (Shade Table)

Shade (Vita Lumin)	A1	A2	A3	A3.5	A4	B1	B2	B3	B4	C1	C2	C3	C4	D2	D3	D4
OPAQUE (Powder & Paste)	A1O	A2O	A3O	A3.5O	A4O	B1O	B2O	B3O	B4O	C1O	C2O	C3O	C4O	D2O	D3O	D4O
DENTINE	A1D	A2D	A3D	A3.5D	A4D	B1D	B2D	B3D	B4D	C1D	C2D	C3D	C4D	D2D	D3D	D4D
OPACIOUS DENTINE	ODA1	ODA2	ODA3	ODA3.5	ODA4	ODB1	ODB2	ODB3	ODB4	ODC1	ODC2	ODC3	ODC4	ODD2	ODD3	ODD4
CERVICAL	AC1+ A1D	AC1+ A2D	AC1	AC2+ A3.5D	AC2	BC+ B1D	BC+ B2D	BC+ B3D	BC	CC+ C1D	CC+ C2D	CC+ C3D	CC	DC+ D2D	DC+ D3D	DC
ENAMEL	E2	E2	E3	E3	E4	E1	E3	E3	E3	E2	E3	E3	E4	E2	E3	E3

TRANSLUCENT	Clear	Pearl	Orange	Brown	Blue	Milky
	T-C	T-P	T-O	T-B	T-LB	T-M

Color Modifier	Yellow	Orange	Pink	Dark Brown	Grey	White	Blue
OPAQUE	OM-Y	OM-O	OM-P	OM-DB	OM-G	OM-W	-
DENTINE	DM-Y	DM-O	DM-P	DM-DB	DM-G	DM-W	DM-B

MARGIN (Shoulder)	S1	S2	S3	S4	S5
	A1, B1	A1, B2, C1, D2	A3, B3, B4	C2, D3, D4	A3.5, A4, C3, C4

GUM	LIGHT PINK	DARK PINK

GLAZE & STAIN: GLAZE, YELLOW, ORANGE, OCHER, BROWN, RED BROWN, DARK BROWN, PINK, LILAC, BLUE, BLACK, GREY, WHITE

- **PASTE OPAQUE** : 16 Shades and Base Opaque (POP-ACE; Orange & Light Orange)

Bleaching Shade of CERAMAX

Shade	A00	A0	B00	B0
DENTINE	AooD	AoD	BooD	BoD
OPAQUE	AoO		BoO	
OPACIOUS DENTINE	ODAo		ODBo	

Colors of CERAMAX

Porcelain	Colors	Packing Unit	Name
OPAQUE (PASTE)	19	3g 5g	POP-A1O/ A2O/ A3O/ A3.5O/ A4O/ B1O/ B2O/ B3O/ B4O/ C1O/ C2O/ C3O/ C4O/ D2O/ D3O/ D4O/ AoO/ BoO/ ACE-O
OPAQUE (POWDER)	18	10g 50g	A1O/ A2O/ A3O/ A3.5O/ A4O/ B1O/ B2O/ B3O/ B4O/ C1O/ C2O/ C3O/ C4O/ D2O/ D3O/ D4O/ AoO/ BoO
OPAQUE MODIFIER	6	10g 50g	OM-Y/ OM-O/ OM-P/ OM-DB/ OM-G/ OM-W
OPACIOUS DENTINE	18	10g 50g	ODA1/ ODA2/ ODA3/ ODA3.5/ ODA4/ ODB1/ ODB2/ ODB3/ ODB4/ ODC1/ ODC2/ ODC3/ ODC4/ ODD2/ ODD3/ ODD4/ ODAo/ ODBo
DENTINE	20	10g 50g	A1D/ A2D/ A3D/ A3.5D/ A4D/ B1D/ B2D/ B3D/ B4D/ C1D/ C2D/ C3D/ C4D/ D2D/ D3D/ D4D/ AooD/ AoD/ BooD/ BoD
DENTINE MODIFIER	7	10g 50g	DM-Y/ DM-O/ DM-P/ DM-DB/ DM-G/ DM-W/ DM-B
ENAMEL	4	10g 50g	E1/ E2/ E3/ E4
TRANSLUCENT	6	10g 50g	T-C/ T-P/ T-O/ T-B/ T-LB/ T-M
CERVICAL	5	10g 50g	AC1/ AC2/ BC/ CC/ DC
MARGIN	5	10g 50g	S1/ S2/ S3/ S4/ S5
GUM	2	10g 50g	Light Pink/ Dark Pink
GLAZE & STAIN	13	10g 50g	GLAZE/ STAIN Yellow, Orange, Ocher, Brown, Red Brown, Dark Brown, Pink, Lilac, Blue, Black, Grey, White

Kit of CERAMAX

MASTER KIT

PASTE OPAQUE (5g) A2O/ A3O/ B2O/ B3O/ ACE-O
OPACIOUS DENTINE (10g) ODA2/ ODA3/ ODB2/ ODB3
DENTINE (10g) A2D/ A3D/ B2D/ B3D
ENAMEL (10g) E2/ E3
TRANSLUCENT (10g) T-C/ T-P/ T-O/ T-B/ T-LB/ T-M
MODIFIER (10g) DM-Y/ DM-O/ DM-P
CERVICAL & MARGIN (10g) AC1/ BC/ S-2/ S-3
GLAZE (3g) GLAZE
LIQUIDS Build-up(15ml)/ POP(10ml)/ Glazing(10ml)

COMPLETE KIT

All porcelains of CERAMAX

TRIAL KIT

PASTE OPAPUE (5g) A2O/ A3O/ ACE-O
DENTINE (10g) A2D/ A3D
ENAMEL & TRANSLUCENT (10g) E2/ E3/ T-C/ T-M
GLAZE (3g) & GLAZING LIQUID (10ml)

Firing Schedule

Firing Schedule

Condition / Bake		PreDry Start Temp.	PreDry Time	Firing Heating Rate	Firing Final Temp.	Firing Holding Time	Vacuum (㎜Hg)
1st OPAQUE (Wash)	Paste	450℃	8 min	60℃/min	980℃	1 min	full
	Powder	500℃	3 min	60℃/min	930℃	1 min	full
2nd OPAQUE	Paste	450℃	8 min	60℃/min	960℃	1 min	full
	Powder	500℃	3 min	60℃/min	920℃	1 min	full
MARGIN(Shoulder)		500℃	3 min	60℃/min	910℃	1 min	full
1st BUILD-UP(Body)		500℃	5 min	60℃/min	880℃	1 min	full
2nd BUILD-UP(Body)		500℃	3 min	60℃/min	870℃	1 min	full
GLAZING	Self-	500℃	3 min	60℃/min	880℃	1 min	-
	Powder	500℃	5 min	60℃/min	860℃	1 min	-

- This firing schedule is just recommended conditions for your good firing results.
- You should change the firing temperature according to your porcelain furnace, and control the holding time within 1min for the size of bridges.

Variation of Firing Condition for Bridges

Condition / Bake		PreDry Start Temp.	PreDry Time	Firing Heating Rate	Firing Final Temp.	Firing Holding Time	Vacuum (㎜Hg)
1st BUILD-UP	1-3 Bridges	500℃	5 min	60℃/min	880℃	1 min	full
	4-5 Bridges	500℃	8 min	60℃/min	885℃	1 min	full
	> 6 Bridges	500℃	10 min	60℃/min	890℃	1 min	full
GLAZING	1-3 Bridges	500℃	3 min	60℃/min	880℃	1 min	-
	> 4 Bridges	500℃	5 min	60℃/min	890℃	1 min	-