

Identification Number: ZEO CE LIGHT 221AABZX00172000  
ZEOQUICK 218AABZX00132000  
Controlled Medical Device – Metal Ceramics for restorations

# ZEO CE LIGHT・ZEOQUICK

[ Contraindications and Prohibitions ]

Do not use this product on patients who have a history of allergy to this product or similar.  
Do not use in patients with teeth grinding or oral parafunction.

[Product description]

[Intended purpose]  
This product is used to fabricate dental metal-ceramic restorations.

[Indications]  
Fabrication of metal-ceramic restorations such as veneers, crowns, bridges, etc.

[Intended users]  
Dental professionals only: dentists and dental technicians

[Clinical Benefit]  
Repair a patient's tooth by replacing the damaged part of the tooth as a metal-ceramic restoration.

[ ZEO CE LIGHT Shapes, Composition and Principles ]

This product consists of the following items and contains the ingredients listed below:

Item	State	Ingredients
Opaque	Paste	Glass powder in the system SiO <sub>2</sub> , pigment, polyethylene glycol, etc.
	Powder	Glass powder in the system SiO <sub>2</sub> , pigment, etc.
Dentine	Powder	Glass powder in the system SiO <sub>2</sub> , pigment, etc.
Enamel	Powder	Glass powder in the system SiO <sub>2</sub> , pigment, etc.
Opaque Dentine	Powder	Glass powder in the system SiO <sub>2</sub> , pigment, etc.
Margin	Powder	Glass powder in the system SiO <sub>2</sub> , pigment, etc.
Translucent	Powder	Glass powder in the system SiO <sub>2</sub> , pigment, etc.
Accent	Powder	Glass powder in the system SiO <sub>2</sub> , pigment, etc.
Gum	Powder	Glass powder in the system SiO <sub>2</sub> , pigment, etc.
Supplement	Powder	Glass powder in the system SiO <sub>2</sub> , pigment, etc.
Stain	Paste	Glass powder in the system SiO <sub>2</sub> , pigment, polyethylene glycol, etc.
	Powder	Glass powder in the system SiO <sub>2</sub> , pigment, etc.

[ ZEOQUICK Shapes, Composition and Principles ]

Item	State	Ingredients
Opaque	Paste	Glass powder in the system SiO <sub>2</sub> , pigment, polyethylene glycol, etc.
	Powder	Glass powder in the system SiO <sub>2</sub> , pigment, etc.
Cervical	Powder	Glass powder in the system SiO <sub>2</sub> , pigment, etc.
Dentine	Powder	Glass powder in the system SiO <sub>2</sub> , pigment, etc.
Enamel	Powder	Glass powder in the system SiO <sub>2</sub> , pigment, etc.

[ Accessories ]

Item	State	Ingredients
Opaque Liquid	Liquid	Polyethylene glycol, etc.
Powder Opaque Liquid	Liquid	Ethylene glycol, etc.
Modeling Liquid	Liquid	Distillated water, etc
Margin Separator	Liquid	Siloxane, etc.
Stain Liquid	Liquid	Polyethylene glycol, etc.

[ Intended use and effect / efficacy]

This product is porcelain fused to metal, used for metal ceramic restoration.

[ Reference Information ]

--Compatible alloys for good combination--  
・Dental alloys for metal-ceramic restorations whose C.T.E. is 13.5～14.8 × 10<sup>-6</sup>K<sup>-1</sup> (25 ～500°C)

[ Product Specification ]

Physical Property		(Test method: ISO6872:2015)	
Items	Firing time	C.T.E. (25～500°C)	Glass Transition Temperature
Opaque	2 times	14.0 × 10 <sup>-6</sup> K <sup>-1</sup>	590°C
	4 times	14.0 × 10 <sup>-6</sup> K <sup>-1</sup>	590°C
Dentine	2 times	13.6 × 10 <sup>-6</sup> K <sup>-1</sup>	580°C
	4 times	13.6 × 10 <sup>-6</sup> K <sup>-1</sup>	580°C
Enamel	2 times	13.6 × 10 <sup>-6</sup> K <sup>-1</sup>	580°C
	4 times	13.6 × 10 <sup>-6</sup> K <sup>-1</sup>	580°C

[ Firing Schedule ]

	Dry Time	Start Temp.	Heat Rate	Firing Temp.	Hold Time	Reducing
Opaque	5-10	450-500	60	920	1	97
Margin, Dentine	6-9	550-600	60	900	1	97
Self-Glaze	4	550-600	60	880	1	Air
Supplement	6	550-600	60	790-830	1	97
Stain (internal)	4	550-600	60	820	1	97
Stain(external)	4	550-600	60	880	1	Air

(NOTE)  
Conditions, such as the above schedule is a guideline, not precise data. Conditions of firing are different depending on kinds or shapes of furnaces. Confirm the temperature and time by test firing before clinical case.

[ Operating Instructions ]

After preparing the metal, sandblast the surface with alumina powder (250μm) or sandblast evenly with a pencil-blaster at more than 3 barometric pressures.

- ①Super Opaque Application and Firing
  - In case where using Super Opaque, paste type, agitate Super Opaque in the container and scoop requisite amount on the pallet. Adjust the viscosity of Super Opaque by adding Opaque Liquid and mix them well. Then, apply Super Opaque on the surface of metal evenly and condense lightly then fire by above schedule.
  - In case where using Super Opaque, powder type, scoop requisite amount on the pallet and adjust the viscosity of Super Opaque by adding Powder Opaque Liquid and mix them well. Apply mixed Super Opaque on the surface of metal evenly and condense lightly then fire by above schedule.
- ②Opaque Application and Firing
  - In case where using Opaque, paste type, agitate Opaque in the container and scoop requisite amount on the pallet. Adjust the viscosity of Opaque by adding Opaque Liquid. Apply Opaque until the metal color is concealed and condense lightly then fire by above schedule.
  - In case where using Opaque, powder type, scoop requisite amount on the pallet and just the viscosity of Opaque by adding Powder Opaque Liquid. Agitate well until the powder become into paste completely. Apply Opaque until the metal color is concealed and condense lightly then fire by above schedule.
- ③Opaque Dentine and Dentine Application

Wash metal frames with purified water before applying Body materials (Cervical and Dentine) after Super Opaque and Opaque are fired. Apply only Opaque Dentine or Accent (T-Salmon) starting from neck to the incisal area, apply progressively thinner, taking subsequent color gradation into consideration. After forming crown shape by Dentine, cut-back and cordon the space for enamel. If necessary, use Accent to reproduce a layer of opaque dentine or to express digitation.
- ④Enamel and Translucent Application

Apply Enamel to the incisal area 1.3-1.5 times bigger than the final crown size, taking into consideration shrinkage after firing. Then remove crown form the plaster model and apply enamel on the contact areas and bottom of pontic. (In case where applying Translucent, cover half of the crown after applying Enamel.) Cool the materials down to about 600°C after firing. Leave them on a firing table until the indicated temperature shows under 600°C.
- ⑤Correction to shape, Glaze firing and Complete

Correct the shape using a carborundum, diamond point or white point. If necessary, remove any scars with silicon point. After correction to shape, clean by an ultrasonic cleaner with diluted water. Then fire for glaze. After firing, polish the lingual surface of the metal. Polish by using brush, fabric buff and polishing material.

## [ Precautions ]

- ① Do not use this product in combination with other brand ceramic materials.
- ② Any use other than specified in the instruction manuals must be avoided
- ③ Only adequately certified personnel should handle this product.
- ④ In case of skin contact, wipe with alcohol cotton swabs, and flush with plenty of running water.
- ⑤ Avoid mixing different alloys.
- ⑥ Do not grind or polish this product in the mouth.
- ⑦ When grinding and polishing fired product, use exhaust fan and anti-dust mask as approved by your local public safety agency in order to avoid inhaling dust. Wear safety goggles to protect the eyes.
- ⑧ To avoid any contamination of this product, remove powder from the bottle in small amounts, and do not replace the powder in the bottle once taken out.
- ⑨ In case of contact with eyes, immediately rinse with running water and seek medical advice.
- ⑩ This product should be used on metal alloys for metal-ceramic restorations, having a coefficient of thermal expansion in the defined range.

## [ ! Handling, Storage and Expiry Date ]

[Handling and Storage]

Keep out of reach of personnel other than dental staff.

[Expiry Date]

- ① This product must be used before the expiry date printed on the package.
  - ② The expiry date printed on the package is based on our authentication.
  - ③ The expiry date printed on the package refers to use expiry date.
- \*(ex.: YYYY-MM means the last day of YYYY (year)/MM (month) as the expiry date)

## [ ZEO CE LIGHT: Package ]

Item	Shade	State/ Amount
Opaque	Super Opaque	Paste / 3.5g Powder / 50g
	O-A0, O-A1, O-A2, O-A3, O-A3.5, O-A4, O-B0, O-B1, O-B2, O-B3, O-B4, O-C1, O-C2, O-C3, O-C4, O-D2, O-D3, O-D4,	Paste / 3.5g
	VO-A1, VO-A2, VO-A3, VO-A3.5, VO-A4, VO-B1, VO-B2, VO-B3, VO-B4, VO-C1, VO-C2, VO-C3, VO-C4, VO-D2, VO-D3, VO-D4	Paste / 3.5g Powder / 50g
Dentine	D-A0, D-A1, D-A2, D-A3, D-A3.5, D-A4, D-B0, D-B1, D-B2, D-B3, D-B4, D-C1, D-C2, D-C3, D-C4, D-D2, D-D3, D-D4, VD-A1, VD-A2, VD-A3, VD-A3.5, VD-A4,	Powder / 20g, 50g, 200g
	VSP	Powder / 20g, 50g, 200g
Enamel	E-1, E-2, E-3, E-4	Powder / 20g, 50g, 200g
	Opal E-1, Opal E-2, Opal E-3, Opal E-4, Opal Amber	Powder / 20g, 50g, 200g
Opaque Dentine	OD-A0, OD-A1, OD-A2, OD-A3, OD-A3.5, OD-A4, OD-B0, OD-B1, OD-B2, OD-B3, OD-B4, OD-C1, OD-C2, OD-C3, OD-C4, OD-D2, OD-D3, OD-D4,	Powder / 20g, 50g, 200g
	Margin	M-1, M-2, M-3, M-4, M-5
Translucent	T-Natural	Powder / 20g, 50g, 200g
Accent	Opal 1, Opal 2, Snow White, White, Vanilla, Milky, Mamelon-Vanilla, Mamelon-Orange, Mamelon-Yellow, Occlusal-Brown, Occlusal-Orange, Occlusal-Enamel, T-Opacity, T-Buff, T-Amber, T-Salmon, T-Gray, T-Violet, T-Blue, T-Baby Pink, T-Pink, Yellow Ocher	Powder / 20g
	T-Glass, T-Clear	Powder / 20g, 50g, 200g
Gum	GUM-1, GUM-2, GUM-3	Powder / 20g
Supplement	SUP-D, SUP-E, SUP-T	Powder / 5g
Stain	Glaze, White, Milky, Light Orange, Orange, Brown, Dark Brown, Gray, Violet, Blue, Pink, Yellow, Black, Indigo, Dark Pink, Amber, Khaki, Buff	Paste/ 3.5g
	White, Milky, Light Orange, Orange, Brown, Dark Brown, Gray, Violet, Blue, Pink, Yellow, Black, Indigo, Dark Pink, Amber, Khaki, Buff	Powder / 2g
	Glaze	Powder / 2g, 10g

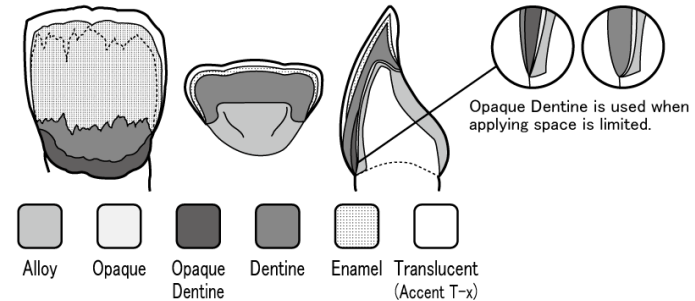
## [ ZEOQUICK: Package ]

Item	Shade	State/ Amount
Opaque	Super Opaque	Paste / 7g Powder / 20g, 50g
	O-A1, O-A2, O-A3, O-A3.5, O-A4, O-B1, O-B2, O-B3, O-B4, O-C1, O-C2, O-C3, O-C4, O-D2, O-D3, O-D4	Paste / 7g Powder / 20g, 50g
Cervical	C-1, C-2, C-3, C-4, C-5	Powder / 20g, 50g, 200g
Dentine	D0.5-A1, D0.5-A2, D0.5-A3, D0.5-A3.5, D0.5-A4, D0.5-B1, D0.5-B2, D0.5-B3, D0.5-B4, D0.5-C1, D0.5-C2, D0.5-C3, D0.5-C4, D0.5-D2, D0.5-D3, D0.5-D4	Powder / 20g, 50g, 200g
	D1.0-A1, D1.0-A2, D1.0-A3, D1.0-A3.5, D1.0-A4, D1.0-B1, D1.0-B2, D1.0-B3, D1.0-B4, D1.0-C1, D1.0-C2, D1.0-C3, D1.0-C4, D1.0-D2, D1.0-D3, D1.0-D4	Powder / 20g, 50g, 200g
Enamel	E-2, E-3, E-4	Powder / 20g, 50g, 200g

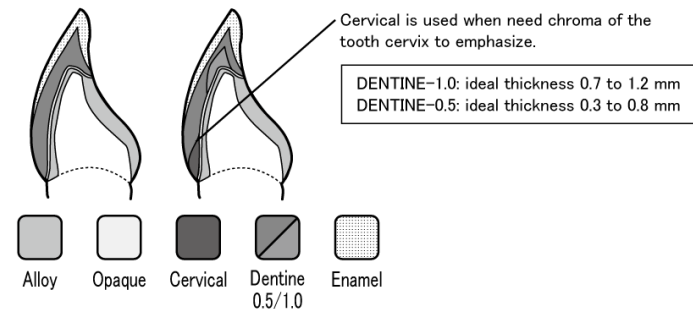
## [ Accessories ]


- Opaque Liquid: 10ml
- Powder Opaque Liquid: 100ml, 500ml
- Modeling Liquid: 100ml, 500ml
- Margin Separator: 3.5ml
- Stain Liquid: 10ml

## ZEO CE LIGHT BASIC BUILD UP



## ZEOQUICK BASIC BUILD UP





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