

## ENGLISH

Read all information, precautions and notes before using.

### ■ PRODUCT DESCRIPTION AND GENERAL INFORMATION

- ESTELITE Σ QUICK is a light-cured, radiopaque, submicron filled composite resin for use in anterior and posterior restorations and is indicated for all carious classes. ESTELITE Σ QUICK contains 82% by weight (71% by volume) of silica-zirconia filler and composite filler. A high filler load offers decreased polymerization shrinkage. All inorganic filler contained in ESTELITE Σ QUICK is a spherical submicron filler (mean particle size: 0.2 μm, particle size range: 0.1 to 0.3 μm) that is designed to deliver excellent gloss retention and wear resistance. The monomer matrix contains Bis-GMA and Triethylene glycol dimethacrylate.
- ESTELITE Σ QUICK implements Radical-Amplified Photopolymerization initiator technology (RAP technology). Curing time for ESTELITE Σ QUICK can be shortened by one-third using a light curing unit with a wavelength range of 400 to 500nm (peak: 470nm) compared to our conventional resin composite. Please see the table depicting the relationship between curing time and increment depth (■ INDICATIONS FOR FILLING AND CURING).
- RAP technology facilitates a longer working time for ESTELITE Σ QUICK.
- ESTELITE Σ QUICK is provided either in SYRINGE or Pre Loaded Tip(PLT).

### ■ SHADE

- A1, A2, A3, A3.5, A4, A5, B1, B2, B3, B4, C1, C2, C3, OA1, OA2, OA3, OPA2, BW (Bleach White), WE (White Enamel) and CE (Clear Enamel/Incisal).
- Opaques shades (OA1, OA2, OA3) have adequate opacity designed for blocking out the dark shine that comes through the oral cavity (Class III and Class IV restoration). The opalescent shades also serve as a dentin layer for the multi-shade layering technique. Shades OA1, OA2 and BW closely match those of primary teeth. However, they are not designed for masking metal or a darkly stained area such as tetracycline stained.
  - OPA2 is designed for masking slight stain or reconstructing a highly opaque tooth (use as a thin layer at the lingual cavity wall of class III and IV).
  - Please check with your local distributor for available shades.

### ■ INDICATIONS

- Direct anterior and posterior restorations including the occlusal surface and all carious classes
- Direct bonded composite veneer
- Diastema closure
- Repair of porcelain/composite

### ■ CONTRAINdicATIONS

- ESTELITE Σ QUICK contains methacrylic monomers. DO NOT use ESTELITE Σ QUICK for patients allergic to or hypersensitive to methacrylic and related monomers.

### ■ PRECAUTIONS

- DO NOT use ESTELITE Σ QUICK for any purpose other than those listed in these instructions. Use ESTELITE Σ QUICK only as directed herein.
- ESTELITE Σ QUICK is designed for sale and use by licensed dental care professionals only. It is not designed for sale nor is it suitable for use by non-dental care professionals.
- DO NOT use ESTELITE Σ QUICK if the safety seals are broken or appear to have been tampered with.
- If ESTELITE Σ QUICK causes an allergic reaction or oversensitivity, discontinue its use immediately.
- Use examination gloves (plastic, vinyl, or latex) at all times when handling ESTELITE Σ QUICK to avoid the possibility of allergic reactions from methacrylic monomers. Note: Certain substances/materials may penetrate through examination gloves. If ESTELITE Σ QUICK comes in contact with the examination gloves, remove and dispose of the gloves, and wash hands thoroughly with water as soon as possible.
- Avoid contact of ESTELITE Σ QUICK with eyes, mucous membrane, skin and clothing.
- If ESTELITE Σ QUICK comes in contact with the eyes, thoroughly flush eyes with water and immediately contact an ophthalmologist.
- If ESTELITE Σ QUICK comes in contact with the mucosal membrane, wipe the affected area immediately, and thoroughly flush with water after the restoration.
- If ESTELITE Σ QUICK comes into contact with the skin or clothing, immediately saturate the area with alcohol-soaked cotton swab or gauze.
- Instruct the patient to rinse his mouth immediately after treatment.
- ESTELITE Σ QUICK should not be ingested or aspirated. Ingestion or aspiration may cause serious injury.
- To avoid the unintentional ingestion of ESTELITE Σ QUICK, do not leave it unsupervised within the reach of patients and children.
- Clean the placement instruments with alcohol after use.
- When using a light-curing unit, protective eye shields, glasses or goggles should be worn.

### ■ INDICATIONS FOR FILLING AND CURING

Be sure to light-cure ESTELITE Σ QUICK extraorally and check the time needed for complete hardening of ESTELITE Σ QUICK with your light curing unit before performing the bonding procedure. The following table illustrates the relationship between curing time and increment depth.

Relationship between curing time and increment depth:

Light type	Intensity (mW/cm²)	Curing time (seconds)	Increment depth (mm) <sup>1)</sup>			
			A1, A2, A3, A3.5, B1, B2, B3, C1, C2, OA1, OA2, OA3, OPA2, BW, WE	A4, A5, B4, C3, OA3, OPA2	A4, A5, B4, C3, OA3, OPA2	A4, A5, B4, C3, OA3, OPA2
Halogen	400	10	1.9	1.6		
		20	2.2	1.9		
	600	10	2.0	1.7		
		20	2.5	2.0		
LED	800	5	1.8	1.6		
		10	2.2	1.9		
	260	10	1.7	1.4		
		20	2.0	1.7		
	900	5	1.7	1.5		
		10	2.0	1.8		
Plasma Arc	950	3	1.9	1.5		

1) Increment depth was determined on the basis of test results performed in accordance with section 7.10 "depth of cure" of ISO4049: 2000.

### ■ SPECIAL NOTES FOR THE USE OF PLT

- PLTs are designed for single patient use only. Do not re-cap and/or re-use the PLT tip once material has been dispensed for that patient.
- Dispensers are not provided for ESTELITE Σ QUICK. Use a dispenser that fits the PLT of ESTELITE Σ QUICK. For proper use and proper disinfection, see manufacturer's instructions.
- Apply the composite at normal room temperature (18 - 30°C / 62 - 84°F). Material that is too cold might be difficult to extrude.
- Use light, controlled pressure to prevent any continued extrusion of material following pressure release.

### ■ STORE

1) Store ESTELITE Σ QUICK at a temperature between 0 - 25°C (32 - 77°F).

2) AVOID direct exposure to light and heat.

3) DO NOT use ESTELITE Σ QUICK after the indicated date of expiration on the syringe or PLT package.

### ■ DISPOSAL

To safely dispose of excess ESTELITE Σ QUICK, extrude unused portion from SYRINGE or PLT and light-cure before disposal.

### ■ CLINICAL PROCEDURE

#### 1. Cleaning

Thoroughly clean the tooth surface with a rubber cup and a fluoride-free paste then rinse with water.

#### 2. Shade Selection

- Select the appropriate shade of ESTELITE Σ QUICK prior to placing the rubber dam using the shade guide provided for ESTELITE Σ QUICK.
- Complete the shade selection within 5 minutes; desiccated teeth are lighter than wet or moist teeth.
  - Lightness (color value) is primary importance on shade selection.
  - When wavering in shade selection, select the lighter (high value) shade.
  - In case of whitened teeth select the shade a few weeks after the completion of whitening. Whitened teeth may become slightly darker.

### 3. Isolation

A rubber dam is the preferred method to isolate the tooth from contamination.

#### 4. Cavity Preparation

Prepare the cavity and rinse with water. Add bevels to the enamel margins of anterior preparations (class III, IV, V), as well as chamfers to the margins of posterior preparations (class I, II) because bevels and chamfers assist in erasing demarcations between the cavity margins and restoration, thereby enhancing both esthetics and retention.

- Scalloped (undulant) bevel could be desirable depending on the esthetics and retention.

- In case of porcelain/composite repairs, roughen the surface with a bur or a diamond point to prepare the area for adhesion; apply phosphoric acid etch for cleaning; rinse thoroughly with water; air dry thoroughly and treat with a silane coupling agent (such as Tokuso Ceramic Primer) according to manufacturer's instructions.

#### 5. Pulp Protection

Glass ionomer lining or calcium hydroxide should be applied if the cavity is in close proximity to the pulp. DO NOT USE EUGENOL BASED MATERIALS to protect the pulp as these materials will inhibit curing of bonding agent and/or ESTELITE Σ QUICK.

#### 6. Bonding system

Apply light-cured bonding system according to manufacturer's instructions. We recommend the use of TOKUYAMA BOND FORCE which is a one component, self-etching, light-cured dental adhesive.

- Do not use self-cured bonding systems. We advise that light-cured bonding systems should be used with ESTELITE Σ QUICK since other types of bonding systems such as self-cured or dual-cured bonding systems may not provide effective adhesion when used with light-cured composite resins. If you want to use self-cured or dual-cured bonding systems, please confirm that such bonding systems are compatible with the light-cured composite resins being used.

#### 7. Dispensing

##### 7-1. PLT

Please read ■ SPECIAL NOTES FOR THE USE OF PLT before use.

- Load the PLT into a dispenser that fits the PLT.

- Remove the PLT cap.

- Extrude the paste directly into cavity or indirectly on the mixing pad.

##### 7-2. SYRINGE

Remove the syringe cap. Extrude the paste onto a mixing pad by turning the handle clockwise. Re-cap the syringe immediately after dispensing.

##### 8. Filling and contouring

Fill the cavity incrementally. Increments should not exceed the indicated depth (please refer to the aforementioned table).

- DO NOT mix ESTELITE Σ QUICK with other brands of resin composite or other shades of ESTELITE Σ QUICK to avoid incomplete cure or voids.

#### 9. Curing

Light-cure each increment for at least the indicated time (please see aforementioned table), keeping the curing light tip within a distance of 2 mm from the increment.

- If other brands of composite resins are layered over the cured composite, follow their instructions.

#### 10. Finishing

Shape and polish the restoration. For finishing, use fine finishing diamond points. To erase the demarcation between the composite and the natural tooth rotate a 12 fluted carbide bur slowly along the margins without water. Use finishing metal strips or vinyl strips for proximal surfaces. For polishing, polish with rubber points or any suitable polishing tool, such as PoGo™ (DENTSPLY/Caulk), Sof-Lex™ (3M ESPE), Identoflex® HiLuster Dia Polishers (Kerr), or D-FINE™ Hybrid Diamond (COSMEDENT, Inc.).

\* PoGo, Sof-Lex, Identoflex and D-FINE are not registered trademarks of Tokuyama Dental Corporation. IMPORTANT NOTE: The manufacturer of ESTELITE Σ QUICK is not responsible for damage or injury caused by improper use of this product. It is the personal responsibility of the user to ensure that this product is suitable for an appropriate application before use.

Product specifications of ESTELITE Σ QUICK are subjected to change without notification. When the product specification change, the instruction and precautions may change also.

Notes for the use in EU

This instruction manual is supplied for Asian dental professionals. If some one who uses the product in EU and needs instruction manual in either of Germany, Italy, French, Spanish, Portuguese, Dutch, Danish, Finnish, Polish and Russian, please contact the manufacturer.

### ■ 中国語

#### 牙科树脂修复材料

使用前请仔细阅读相关信息、注意事项及注解

### ■ 产品阐述和综合信息

1) ESTELITE Σ QUICK是一种光固化、X光线阻射性、亚微米充填的，用于前、后牙和为各级龋齿修复所必要的复合树脂。二氧化硅-氧化锆填料及复合填料占ESTELITE Σ QUICK的重量比为82%（体积比为71%）。产品的高填料特性使聚合收缩减小。ESTELITE Σ QUICK中的无机填料均为一种球状亚微米填料（即：颗粒尺寸，0.2μm；尺寸范围，0.1至0.3μm）。单体含有Bis-GMA和二甲基丙烯酸三甘醇酯成分。

2) ESTELITE Σ QUICK采用辐射增幅光聚合触媒技术(RAP技术)。与传统的复合树脂材料相比，使用波长范围为400到500nm(峰值，470nm)的一种光固化装置，可以使ESTELITE Σ QUICK的固化时间缩短至三分之一。请参考固化时间与充填深度关系的图表。(■充填和固化的适应症)。

3) RAP技术使ESTELITE Σ QUICK具有更长的操作时间(约90秒)。

4) ESTELITE Σ QUICK为您提供注射器或预装头Pre Loaded Tip (PLT)。

### ■ 比色

A1, A2, A3, A3.5, A4, A5, B1, B2, B3, B4, C1, C2, C3, OA1, OA2, OA3, OPA2, BW (Bleach White, 漂白, WE (White Enamel, 白色珐琅质) and CE (Clear Enamel/Incisal, 透明珐琅质/门牙)。

- 乳白色牙(OA1, OA2, OA3)具有不透明性，为阻隔来自口内的阴影(III级和IV级修复)而设计。乳白色也适用于多牙分层技术象牙质层(OA1, OA2 and BW)比较接近乳牙的颜色。然而，他们并不是为遮盖金属或色素沉积部分(如四环素牙)而设计的。

- OPA2是为遮盖轻度色素沉积，或用来修复高度不透明齿部而设计的(在III、IV级的舌壁上一薄层)而设计。

- 请向当地经销商咨询可以使用的颜色。

### ■ 适应症

- 直接用于包括咬合面和所有类型龋齿的前、后牙的修复。

- 直接用于粘接复合树脂贴面

- 间隙封闭

- 瓷冠/复合树脂修复

### ■ 禁忌症

ESTELITE Σ QUICK中含有甲基丙烯酸单体，对甲基丙烯酸及相关单体过敏以及高度敏感的患者不能使用。

### ■ 注意事项

1) 除说明书所述外ESTELITE Σ QUICK不能用于其它任何目的。请按本说明书使用ESTELITE Σ QUICK。

2) ESTELITE Σ QUICK仅为牙科专业护理人员销售和使用而设计。本产品并非市销产品，也不适合非牙科专业人士使用。

3) 禁止使用已经开封或者经过使用的ESTELITE Σ QUICK。

4) 如果ESTELITE Σ QUICK引起过敏反应或过度敏感，请立即停止使用。

5) 在每次使用ESTELITE Σ QUICK时，都要使用手套(橡胶、乙烯、或乳胶手套)，以防止可能发生的对甲基丙烯酸单体的过敏反应。注：某些物质/材料可以穿透检查手套。如果ESTELITE Σ QUICK进入手套，脱下并扔掉手套，尽快用水彻底清洗双手。

6) 避免ESTELITE Σ QUICK与眼睛、粘膜、皮肤和衣物接触。

- 如ESTELITE

