

**TECHNICAL BULLETIN  
INSTRUCTIONS**

Made in USA

**ORION  
CORE BUILD-UP MATERIAL  
CHEMICAL AND LIGHT CURE**

**CONTENTS:**

- 10 g-Part A Restorative Paste Natural, Self Cure
- 10 g-Part A Restorative Paste Contrast, Self Cure
- 20 g-Part B Paste, Activator
- 4.5g-Restorative Paste Natural, Light Cure
- 4.5g-Restorative Paste Contrast, Light Cure
- Accessories, Instructions

**OUTSTANDING FEATURES OF THE MATERIAL**

- Virtually unlimited working time in light cure form, and convenient working time in self cure (chemical) form.
- Two shades: One contrasting for easy distinguishability from tooth structure; the other tooth coloring for use under shell crowns.
- Moldable, non-sticky yet has adhesive consistency.
- Contains moderately hard filler for easier carving and shaping.
- Long shelf life.
- Well-balanced X-ray opacity permits easy distinguishability from tooth structure, as well as, from pins and posts.
- Substantial chair-time savings.

**GENERAL INFORMATION**

Today the composite type core restoratives are most frequently used in dentistry. They offer the advantage of superior mechanical strength and ease of handling over the glass ionomer cements, and greater versatility in use, combined with better adhesion to tooth structure, in comparison to dental amalgam.

Composite type core restoratives are available in either natural or contrast shades, the former being indicated for use under semi transparent ceramics, the latter, provides the convenience of easy distinguishability from tooth structure. From the point of view of the curing technique, the composite materials are available in either self- or light cure versions, each of them offering certain advantages, but also imposing certain limitations. The self-cure materials are more popular because they provide unlimited depth of cure, and may be used in places where light of sufficient intensity might not penetrate. The light cure materials offer convenience of handling, and virtually unlimited working time.

Dent Zar's Orion represents a convenient combination of self cure core restorative and light cure, which gives the clinician the choice to elect either light cure form or self cure, in either natural or contrast shade. While light cure form may be preferred because of simplicity of the one component system, and convenience of working without time pressure, the self cure will allow the use of the restorative in areas inaccessible to light, and to make larger restorations without the necessity of curing in layers.

Orion differs significantly from the conventional restoratives as it was optimized to meet specific requirements, and provide features most desirable for core build-up materials. This includes well-balanced X-Ray Opacity, ability to distinguish the material from tooth structure and posts, carvability, outstanding depth of cure (to maximize the advantage of light cure form), and convenient working time in self-cure form.

**\*\*\*\*\* CHARACTERISTICS OF THE MATERIAL \*\*\*\*\***

**ORION SELF-CURE CORE BUILD UP MATERIAL**

1. Mixing time at room temperature for self-cure material-----	0.5 minute
2. Working time*-----	2.5 minutes
3. Setting time-----	0.5-1 minute
4. Flexual Strength-----	103.10 MPa
5. Diametral Tensile Strength-----	49.70 MPa
6. Compressive Strength-----	253.70 MPa

\*Working time may be extended by mixing pastes just after removal from refrigerator or by using a cold slab.

## ORION LIGHT CURE CORE BUILD UP MATERIAL

1. Curing time*-----	40-60 sec.
2. Flexural Strength-----	98.28 MPa
3. Diametral Tensile Strength-----	48.01 MPa
4. Compressive Strength-----	218.50 MPa

\*Depending on the characteristics of the light.

### DIRECTIONS FOR USE SELF CURE FORM

Dispense equal amount of Part A Paste (in either contrast or natural shade) and Part B catalyst on mixing pad. Use the proper ends of spatula to avoid contaminating of the paste.

Spatulate the two pastes together for approximately 20 seconds. Make certain the two pastes are well blended with no residual streaks of each paste evident in the mixture.

### LIGHT CURE FORM

Regular Orion kit comes with light cure core build-up material in natural and contrast shade.

**NOTE:** Contrast will change the color from blue to pink during the curing process. The color change insures deep light penetration and thorough curing of the material. (Once the material is completely polymerized, it will return to its original color in 3 to 7 days). This enables it to be easily distinguishable from the tooth structure.

After placement, cure light cure Orion Core Build-Up material for 40-60 seconds from facial, lingual and occlusal aspects.

### FUNDAMENTAL RULES

\*Orion may be used in conjunction with pins and posts or without. On vital teeth it is recommended conservative cavity preparation; with rounded retentive areas, it is also recommended to use Calcium hydroxide base liner especially in situations involving proximity of the pulp, and over soft and decay-prone dentin, in order to provide an additional measure of protection against secondary decay.

\*Conventional canal preparation, including toiletry with 5% sodium hypo chloride solution and through drying of the preparation, is critical for providing maximum retentive strength. An alternative method of cavity preparation may include the use of polycarboxylic acid solutions with, or in place of, the sodium hypo chloride solution.

\*In order to achieve micro mechanical retention for maximum bond strength it is recommended to etch any enamel present.

\*Use of bonding systems, of your choice, is recommended.

\*Orion is Bis-GMa composite material an ingredient that in some people can cause an allergic reaction or result in skin or tissue irritation. Avoid contact with the core build-up pastes. If contact occurs, wash immediately with soap and warm water. Improper use may result in allergic reaction of skin or tissue irritation, in which case discontinue use of the product.

### CUSTOM ORION KITS AVAILABLE

Orion all contrast, all natural, or any combinations desired.

All kit components are available separately.

### STORAGE

Do not store or expose kit to temperatures over 72°F (22°C).

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