

Nu Radiance® Nu Tempcement NE

Eugenol-Free Polymeric Temporary Crown and Bridge Cement

Features:

Well-balanced adhesive properties provide good prosthesis retention while allowing for trouble-free removal. • Excellent handling characteristics • X-ray opacity • Low irritation potential • Negligible solubility

- Compatible with all commercially available permanent cements.
- Low film thickness
- Excellent resistance to oral environment and mechanical strength assure good long-term performance, whenever desired.
- Unique two-stage curing mechanism. In the first stage, the material achieves a consistency hard enough to hold the restoration in place, while allowing 60 - 80 seconds for easy removal of the excess.
- Does not contain eugenol.

Cured Restorative

Water Solubility: Negligible Film Thickness: Below 20

Hardness, Barcol: 40-42

Compressive Strength : 69 MPa (10,000 psi)

Diametral Tensile Strength: 13.8 MPa (2,000 psi)

Application

In case of direct pulp exposure, use a calcium hydroxide-type base to cap the pulp.

As with all synthetic cements which are hydrophobic by nature, it is imperative to disinfect and dry the preparation before cementing. The presence of moisture may result in an inferior retention, possibility of microbial contamination, and post-operative sensitivity. Unless contraindicated for the reason of proximity to the pulp, the removal of smear layer prior to cementing will further contribute to enhanced retention and greater integrity of the tooth/cement interface.

Treatment of the abutment for 30 seconds with antimicrobial solutions such as 2% sodium hypochlorite (NaOCl)* contributes to a lower incidence of post-operative sensitivity and prevents occasional abutment discoloration and odor due to microbial growth. On sensitive teeth and for patients with no known allergic reaction, sodium hypochlorite may be substituted with Erythromycin (250mg/5ml). Treatment with antimicrobial agents should be preceded by impression taking and followed by rinsing and drying.

* 2% solution of sodium hypochlorite may be prepared by diluting commercial 5% hypochlorite bleach with water in a 4:6 ratio.

Instructions for Cementing

Spread a thin layer of cement inside the crown and then seat the crown firmly. After 1 minute, trim excess.

There are two minutes of working time at room temperature of approximately 73°F (23°C). Full cure will occur within 3 minutes after the material is exposed to body temperature. It should be remembered that working and setting times are temperature dependent, being longer at lower temperatures and shorter at higher temperatures.

Nu Tempcement features a unique two-stage curing mechanism. In the first stage, the material achieves a consistency hard enough to hold the restoration in place, while allowing 60 - 80 seconds for the easy removal of the excess.

Nu Tempcement bonds to dentin and metals strongly enough to prevent marginal leakage and loss of retention, yet it allows for trouble-free removal. Good biocompatibility of this cement is expected to minimize post-operative discomfort.

Helpful Hints

If desired, bonding strength to dentin may be reduced by applying a very thin layer of releasing agent over abutment. (This procedure is especially recommended for tight-fitting temporary restorations. If the restoration is intended to be recemented, the releasing agent should also be applied inside the restoration, in order to facilitate cleaning.)

Occasionally, black stains may be observed on the abutment prepared for permanent cementation. They may be easily removed with a hydrogen peroxide solution.

Storage: Store at temperatures not exceeding 73° F (23°C).

When stored under such conditions, the material has a shelf-life of eighteen months. Refrigerate when the material is not in use (for example, overnight and on weekends). When cold, the material has a stiffer consistency. For easier handling, remove from refrigeration at least 15 minutes prior to use.