Radica – Used in Overtemps™

Visible light curing produces exceptional durability, wear-resistance, and esthetics in provisional restorations made with Radica resin.

DENTSPLY Prosthetics calls Radica 'a revolutionary material' with properties that allow creation of 'extremely durable, highly wear-resistant provisionals with superior esthetics.' The provisional and diagnostic resin can remain in the mouth for up to 2 years for all single-unit restorations, inlays/onlays, and 3-unit bridges (up to the 2nd bicuspid). Engineered radiopacity can be used as a part of a radiographic scanning process (xrays and computed tomography).

According to DENTSPLY Prosthetics, concerns about longer-term wear, comfort, durability, and load-bearing have been overcome by a visible lightcuring composite platform that enables Radica-made restorations to exceed the performance of other provisionals. Radica is available in all 16 A-D classic dentin shades and 2 popular bleach shades.

In this Dental Product Shopper evaluation, 7 dentists evaluated Radica-made restorations at provisional and definitive placement, rating such features as translucency, provisional contacts/occlusion, and restoration integrity.

Surface Reflectance/Polished Luster and Translucency

Surface reflectance/polished luster at provisional placement was rated as excellent by 5 evaluators and as very good by 2. Remarks included 'fabulous' and 'polishing glaze worked fine at placement and after.' A dentist who said margin

At definitive placement, reflectance/polished luster was evaluated by 6 dentists; 3 rated it as excellent and 3 rated it as very good to good. One evaluator noted that 'polishing/glazing provides a smooth, reflective surface.'

Translucency at provisional placement was rated as excellent by 2 dentists and as very good or good by 5. One evaluator noted that it 'looks as good as porcelain.' Of the 6 dentists who evaluated definitive placement translucency for lack of staining and discoloration, 3 rated it as excellent, 2 rated it as good, and 1 rated it as poor. One evaluator said, 'The issue seems to be air pockets in the fabrication process.' Another dentist said translucency is 'very achievable with enamel material.'

Shade Matching

Shade matching at provisional placement was rated as excellent by 3 evaluators and as very good by 4. One dentist said, 'Radica shades are right on.' Of the 6 dentists who evaluated shade matching at definitive placement, 3 rated it as excellent and 3 rated it as very good or good. One dentist called Radica shades 'very true.'

Contacts/Occlusion

Comments about contacts/occlusion with Radica restorations at provisional placement ranged from 'occlusion was way off in 1 case' to 'excellent contacts' even with 6 anterior veneers.' One evaluator said, 'The lab makes this material sing!' Four evaluators rated this feature as excellent, 2 rated it as very good or good, and 1 rated it as poor.

Restoration Integrity and Tissue Response (Definitive Restoration)

Of the 6 dentists who evaluated restoration integrity at definitive placement, 4 rated it as excellent, 1 rated it as good, and 1 rated it as poor. One dentist said, 'One broke, and seems to pick up lots of stain in air pockets.'

When asked about patient tissue response, one evaluator said marginal integrity with Radica is 'much more accurate, leading to superior tissue response.'Five evaluators rated tissue response as excellent and 2 rated it as good.

Overall Satisfaction

Overall satisfaction with Radica was rated as excellent by 4 evaluators, as very good by 1, and as fair by 2. One evaluator said, 'Custom staining/glazing makes Radica the most esthetic material I've ever used.' Another dentist said, 'Many patients ask why we're replacing their beautiful temporaries.'