

INNOVATION Z Project No.13



Controlled Medical Device – Dental glazing material (Coloring material for polymer-based crown, Bonding Material for Dental Resin)

Nu:le Coat

Characterization material for resin Pre-treatment for PEEK

Nutle Coat 3

More easily, more satisfactory.





For Laboratory Low Viscosity for Transparent Glossy Coat & Clinic Use Easy Application



Can be overglazed



Durability





Adjustment



PEEK frame

Manufacturer

YAMAKIN CO., LTD. 1090-3 Otani, Kamibun, Kagami-cho, Konan-shi, Kochi, 781-5451 Japan

Head Office: 1090-3 Kamibun, Kagami-cho, Konan-shi, Kochi, 781-5451, Japan Branch Office: Osaka, Tokyo, Nagoya, Fukuoka, Sendai, JAPAN Factory and R&D: Kochi, JAPAN https://www.yamakin-global.com E: contact@yamakin-gold.co.jp



Nutle Coat •



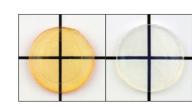
Easy Application and Solid Coating



Pursuing Transparency

The higher surface hardness remained the same and reduced the amount of photopolymerization initiator that causes yellowness to the extreme.

Nu:le Coat Liquid Clear (hereafter Clear) is clear even immediately after light curing, so it is difficult to affect the original color tone of dental restoration even when applied overglaze. Therefore, Clear can be used easily for whitening shades.





Applied 2 layers of Nu:le Coat



Small Curing Strain

The combination of flexible polyfunctional monomers and tough cross-linkable monomers reduced curing strain.

Therefore, even if the applied layer become thicker because of overglaze, it is less likely to occur cracks or floated surface.



Crack Evaluation Test

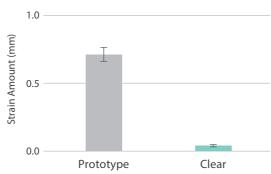
Dropped the liquid directly into the pit and fissure of crowns and evaluated by microscopy for the presence of cracks and floated surface after light curing.



Thanks to the small curing strain, the inhibition of cracking and floated surface can be expected even when a lot of liquid has been applied to the pit and fissure or the junction.

Evaluation of Curing Strain





Curing deformation after light curing (strain amount) is greatly reduced comparing the thickness before light curing (0.5 mm).

Excellent Durability

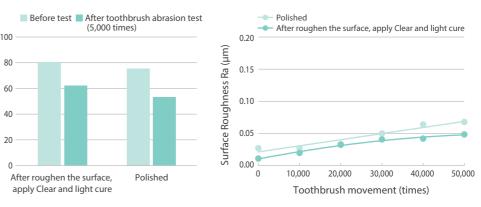
In the evaluation of toothbrush abrasion test (50000 times) *1), it is equal to or more than that of polishing finish, and excellent abrasion resistance has been confirmed.

It is reported that plaque adherence is rapidly increase when the surface roughness exceeds 0.2 µm *2. However, the surface roughness of Nu:le Coat applied surface is less than 0.1 µm even after 50,000 times of toothbrush abrasion test.

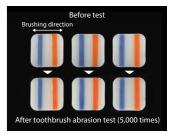
- *1) ISO14569-1, the ratio of toothpaste and water is 1:2. Load weight 2.0N
- Brush stroke 50,000 times is equivalent to about 7 years if it is assumed to brush teeth twice a day and brush 10 times per tooth.

 *2) Bollen. M. Et al.: Dental Mater, 13 (4) 258~269, 1997.

Gloss Retention Scratching Resistance



Peel Resistance



It has been confirmed that Nu:le Coat color type (Blue and Orange) which is for characterization is remained as well after 50,000 times of toothbrush abrasion test.

Low Viscosity and Easy Application

Nu:le Coat Liquid was pursued an optimal viscosity that is easy to apply. Thanks to low viscosity design, hard to remain traces of a brush and easy to apply thinly and evenly. Thin hard-coated layers of about 5 µm can be created, allowing coating and characterization without loosing the surface structure of dental restorations.

And please use Gel type when thicker layers are necessary.

Thickness of 1 layer • Liquid: 5-15 μm • Gel : 20-50 μm



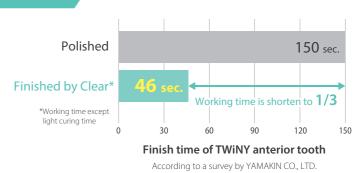
Easy glazing with easy steps. There is no loss or chipping concern during polishing.

Shorten the working time with Nu:le Coat

Finish with polishing requires craftspersonship so polishing is a very valuable task.

However, depending on the level of proficiency, the finish may vary.

On the other hand, Nu:le Coat is easy to apply and provide glaze on the surface in a short period of time regardless of proficiency. The working time becomes 1/3 to achieve glaze on the surface.



Get More Aesthetic Qualities With Color Type

Wide Range of Color Line-up for Crown Characterizing

White, Gray, Brown, Yellow, Orange and Blue lineups allow for free characterization of crowns.











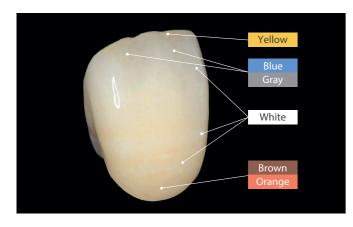








Dark Brown HV





Shade plus

There are A plus, B plus, C plus, and D plus lineups that allow fine adjustment of the shade.







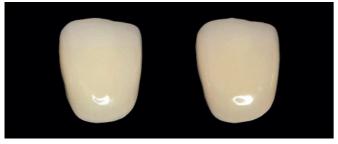








Applied 1 layer of A plus.

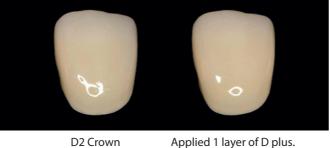


C2 Crown Applied 1 layer of C plus.



B2 Crown

Applied 1 layer of B plus.



Applied 1 layer of D plus.

Gum Shades

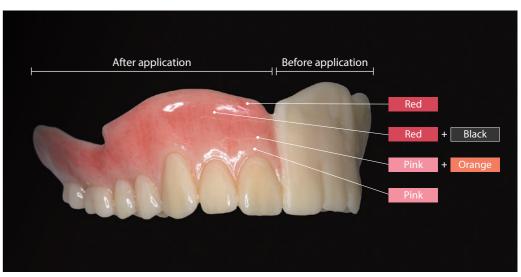
There are also Gum shade line-up (Red, Pink and Black) for denture application or Gum expression.









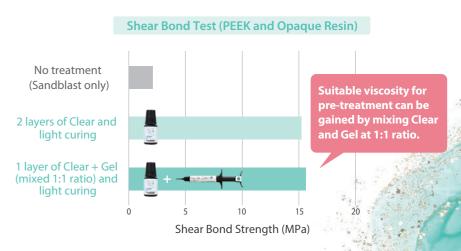


Characterized resin frame by Nu:le Coat Liquid Red, Pink, Black and Orange

Plus One Application

Pre-treatment of PEEK before applying resin materials.

Super engineering plastics PEAK-based (PEEK, PEKK, etc.) have attracted attention in recent years for their ability to mitigate impact on bone in implant cases. By the combination of Clear and Gel, composite resin (e.g., Luna-Wing) and hybrid composite resin (e.g., TWiNY) can be built up on PEEK frame.





Applied Clear and Gel (at 1:1 ratio) after sandblasting

Completion after TWiNY application

Line-up

For Both Dental Laboratory and Chairside Use

Nu:le Coat can be used not only for the finishing of resin-based dental restorations but also for regular maintenance of resin-based dental restorations that have lost their glaze.

Procedure of Applying Nu:le Coat

*This product is for resin restoration only. This product cannot be used for tooth substances.

For Laboratory Use



After shape modification Roughen the surface (Alumina Sandblast etc.)



Application of Nu:le Coat (characterizing and glazing)



Light Curing (60 sec. by LED CURE Master)



Completion

For Chairside Use



Filling composite



After light irradiation, shape Application of Nu:le Coat modification and roughening (glazing)





Light irradiation *Light irradiators should have an output peak wavelength of 400±20 nm, and also should contain the purple LED



Gel is recommended to use for the parts where need thickness.





For Color types, shake the bottle well before use as the colouring material may settle.

Please avoid using this product for occlusal parts where pressure is applied.





Nu:le Coat

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Single Package

Nu:le Coat Liquid Clear (6ml) Nu:le Coat Liquid (4ml) 15 colors (White, Gray, Brown, Yellow, Orange, Blue, Red, Pink, Gum, Dark Brown HV, Black, A plus, B plus, C plus, D plus

Single Package

Nu:le Coat Gel (2ml)

*1) When using a photopolymerization device other than those listed above, refer to IFU for each system and check that the effective wavelength (e.g. purple LED: peak output wavelength 400 \pm 20 nm) is suitable for the material before use. For the effective wavelength, please contact the distributor of the photopolymeri

Light Curing Time

Pre-curing

Final curing

Pre-treatment for

PEEK

Chairside Use*2

Equipment*1

LED

CURE

Master

Dental

Curing

Light

30 sec.

60 sec.

30 sec.

Pre-curing STD 10 sec.

Final curing STD 20 sec.

Set Package

Intro Set

• Nu:le Coat Liquid Clear (6ml): 1 pc • Nu:le Coat Liquid Clear (6ml): 1 pc

• Nu:le Coat Gel (2ml) : 1 pc

• Nu:le Coat Gel (2ml) : 1 pc • Round Brush: 1 pc • Nu:le Coat Liquid (4ml) : White, Gray, Blue, Brown (1 pc each)

• Flat Brush: 1 pc

• Round Brush: 1 pc

• Disposal Plate: 10 pcs

• Flat Brush: 1 pc • Disposal Plate: 20 pcs

Regular Set

• Nu:le Coat Liquid (4ml): White, Gray, Blue, Brown, Yellow, Orange, A Plus, B Plus, C Plus, D Plus (1 pc each)

Full Set

• Nu:le Coat Liquid Clear (6ml): 1 pc

• Nu:le Coat Gel (2ml): 1 pc

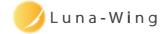
• Round Brush: 1 pc • Flat Brush: 1 pc Disposal Plate: 30 pcs

Set Contents

Туре	Gel	Liquid															
Color	Clear	Clear	White	Gray	Brown	Yellow	Orange	Blue	Red	Pink	Gum	Dark Brown HV	Black	A Plus	B Plus	C Plus	D Plus
Intro Set	•	•															
Regular Set	•	•	•	•	•			•									
Full Set	•	•	•	•	•	•	•	•						•	•	•	•

Related Products





Hybrid Composite Resin for C&B





Indirect composite resin



LED CURE Moster

LED light cure apparatus



^{*2)} For intraoral use and large application areas, multiple light