

Dyract[®] AP

Advanced Performance Compomer Restorative

Dyract[®] AP is a universal compomer-based restorative material suitable for cavities in anterior and posterior teeth.

Dyract AP exhibits advanced performance regarding physical strength and abrasion resistance.

Dyract AP allows a simplified and fast application technique and combines fluoride-releasing glass-ionomer chemistry with the strength and aesthetics of a composite.

Dyract AP, pre-dosed in Compules[®] Tips for direct intra-oral application, is available in 12 Vita^{®1} shades and one extra light (XL) shade.

Dyract AP is used following application of Prime&Bond[®] NT, a universal self-priming dental adhesive designed to bond the restorative to enamel and dentine.

Caution: For dental use only.

COMPOSITION

Dyract AP

Urethan dimethacrylate (UDMA)
Tetracarboxylic acid-hydroxyethylmethacrylate-ester (TCB Resin)
Alkanoyl-poly-methacrylate
Strontium-fluoro-silicate glass
Strontium fluoride
Photo initiators
Butyl hydroxy toluene
Iron oxide pigments

Prime&Bond NT

Di- and trimethacrylate resins
Functionalised amorphous silica
PENTA (dipentaerythritol penta acrylate monophosphate)
Photoinitiators
Butyl hydroxy toluene
Cetylamine hydrofluoride
Acetone

INDICATIONS

Dyract AP is indicated for all cavity classes in anterior and posterior teeth.
The width of class I and II cavities must be less than 2/3 of the intercuspal distance.

¹ Vita is a registered trademark of Vita Zahnfabrik H. Rauter GmbH & Co.

CONTRAINDICATIONS

Direct or indirect pulp capping.

Core build-up for full ceramic crowns.

Use in patients with a known allergy to dimethacrylate resins or any other of the components.

When contamination with saliva, blood, etc. cannot be avoided.

WARNINGS

1. Prime&Bond NT contains acetone. Acetone is highly flammable. Keep away from sources of ignition - no smoking. Do not breathe vapour. Take precautionary measures against static discharges.
2. Prime&Bond NT and Dyract AP contain methacrylates that may be irritating to the eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
3. Prime&Bond NT and Dyract AP may cause sensitisation by contact with skin or mucous membranes in susceptible persons. After accidental contact, wash immediately with plenty of soap and water or rinse with plenty of water.
If sensitisation has occurred, discontinue use.

PRECAUTIONS

Avoid Prime&Bond NT saturating gingival retraction cord. If Prime&Bond NT soaks into the cord, it may set hard and bond the cord to the underlying tooth surface making removal difficult.

INTERACTIONS WITH DENTAL MATERIALS

Eugenol containing dental materials should not be used in conjunction with this product because they may interfere with hardening and cause softening of the polymeric components of the material.

If hydrogen peroxide has been used to clean the cavity, proper rinsing is essential. High concentration hydrogen peroxide may interfere with the setting of polymerisable material and should not be used prior to the application of Prime&Bond NT.

Prolonged and intensive contact with acetone-containing products may lead to minute dissolution of the outermost surface of calcium hydroxide materials. This has no detrimental effect on the adhesion to the cavity walls.

ADVERSE REACTIONS

In isolated cases, reversible inflammatory changes of the oral mucosa have been reported after accidental contact with acetone solutions and acrylate monomers.

STEP-BY-STEP INSTRUCTIONS

1. Shade Selection

Shade selection should be made prior to the restorative procedure whilst the teeth are hydrated. Remove any extraneous plaque or surface stain. Use the Dyract AP shade guide provided which contains samples of original Dyract AP restorative. The colour coding dot on the shade guide matches the coloured cap on the Compules Tip.

Alternatively, a Vita Lumin Vacuum shade guide may be used. The Dyract AP shade corresponds to the central part of the respective Vita tooth.

2. Cavity Preparation

In all classes of cavity this may be kept to the minimum required for caries removal.

3. Cleaning

Cavity cleanliness is paramount for the development of adhesion.

In cases where no cavity preparation has been made, clean the tooth surface with a rubber cup and pumice or a prophylaxis paste like Nupro®. Preparing a fresh surface with a finishing bur will significantly increase bond strength to enamel.

Wash surface thoroughly with air/water spray.

Remove rinsing water by blowing gently with an air syringe or blot-dry with a cotton pellet.

Do not desiccate the dentine structure.

4. Pulp Protection

For direct or indirect pulp-capping protect the dentine close to the pulp (< 1 mm) with a hard-setting calcium hydroxide liner (e. g. Dycal®), leaving the remaining cavity surface free for bonding with Prime&Bond NT.

5. Conditioning of dentine and enamel

For most restorative procedures with Dyract AP it is not necessary to condition the prepared tooth. Only in the case of cavities with bevelled enamel margins or in situations which require maximum adhesion properties, acid conditioning is recommended.

In this case, use a 36% phosphoric acid gel such as DeTrey® Conditioner 36 or NRC™ Non-Rinse Conditioner according to the directions for use of these products.

6. Application of Prime&Bond NT

1. Dispense Prime&Bond NT directly onto a fresh Applicator Tip² or onto a disposable brush. Alternatively, dispense into a fresh DENTSPLY Applicator Dish² or standard dappen dish.

2. Immediately apply ample amounts of Prime&Bond NT to thoroughly wet all cavity surfaces.

This surface should be saturated which may necessitate additional application of Prime&Bond NT.

3. Leave the surface undisturbed for 20 seconds.

4. Remove solvent by softly blowing with air from a dental syringe for at least 5 seconds. **Surface should have a uniform, glossy appearance. If not, apply a second layer of Prime&Bond NT repeating steps 2 to 4.**

5. Light-cure for a minimum of 10 seconds³. Ensure uniform exposure of all cavity surfaces.

6. Immediately place Dyract AP compomer over the cured Prime&Bond NT.

7. Placement of Dyract AP

Insert Compules Tip into the notched opening of the applicator gun barrel.

Dispense Dyract AP directly into the cavity preparation. In deep cavities, incremental placement and curing (in 3 mm layers or less) is recommended to minimise polymerisation shrinkage.

8. Curing

Cure each increment separately with a VLC dental polymerisation unit for 40 seconds or according to the table below. The tip of the light guide should be held as close as possible to the restoration during curing.

Important: Be sure to expose each area of the entire restoration to the curing light.

Additionally, the restoration should be cured through lingual or buccal enamel walls.

² DENTSPLY Applicator Dish and Applicator Tips are available from your dental dealer.

³ Check curing light for minimum curing output of at least 300 mW/cm².

Shade	Light Curing Time (seconds)	Curing Depth (mm)
B1, XL, I-B1	20	3
A2, A3, C2, C3	30	3
A3.5, A4, B3, C4, O-A2, O-B3	40	3

9. Finishing

Begin finishing immediately after curing. Gross excess material may be removed with fluted finishing burs or diamonds. Finishing is best achieved by using Enhance™ Finishing and Polishing Discs and interproximal finishing and polishing strips. A high final lustre can be obtained by applying Prisma® Gloss™ and Prisma Gloss Extrafine Polishing Pastes.

MAINTENANCE OF APPLICATOR GUN

The applicator gun is sterilisable by autoclave or cold sterilisation solution following the manufacturers' instructions.

It is recommended that the applicator gun be disassembled for assured sterilisation. Partially close the applicator gun and place thumb under the rear portion of the hinge. Push upward and lift hinge separating the applicator gun, exposing the plunger. Remove residual compomer with a soft paper tissue and a suitable solvent (70% alcohol). To reassemble, insert plunger into applicator gun barrel, press components together and snap hinge mechanism in place.

STORAGE

The Prime&Bond NT bottle and Dyract AP Compules Tips should be tightly closed immediately after use.

Keep out of sunlight.

Not to be stored at temperatures exceeding 25 °C.

Keep Prime&Bond NT in a well ventilated place.

Humidity can adversely affect the properties of unsealed Compules Tips. Therefore keep Compules Tips sealed in their blister pack until use. Under normal ambient conditions, unsealed Compules Tips stay usable for about 4 weeks.

BATCH NUMBER AND EXPIRY DATE

The batch number should be quoted in all correspondence which requires identification of the product.

Do not use after expiry date.

If you have any questions, please contact:

Manufacturer:

DENTSPLY DeTrey GmbH
De-Trey-Str. 1
78467 Konstanz
GERMANY
Phone +49 (0) 75 31 5 83-0

Distributor:

DENTSPLY Limited
Hamm Moor Lane
Addlestone, Surrey
Weybridge KT15 2SE
Phone (0 19 32) 85 34 22

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