

SYNERGY® D6

Instructions for use

EN

Definition

SYNERGY D6 is a syringeable, sculptable, radiopaque, highly filled nano-hybrid composite for the restoration of all teeth. The SYNERGY D6-System consists of the following components:

SYNERGY D6 Dentin covers a wide range of tooth shades with fewer shades

SYNERGY D6 Universal Enamel is a highly translucent surface layer composite to improve gloss or to restore incisal edges.

SYNERGY D6 Enamel White Opalescent is a highly translucent composite for creating natural depth appearance and for building up the incisal edge of very light and bleached teeth.

SYNERGY D6 White Bleach and Bleach Opaque are used for the restoration of extremely white teeth.

SYNERGY D6 is cured in a tooth cavity or on a model with all common halogen- or LED lights. (f.e. Coltolux LED)

Composition

Methacrylates
Barium glass, silanized
Amorphous silica, hydrophobed

Technical Data

Complies with ISO 4049
Average filler particle size: 0.6 µm
Range of particle size: 0.02 – 2.5 µm

SYNERGY D6

Filler content by volume: 65 %
Filler content by weight: 80 %

Indications

SYNERGY D6 Dentin Shades are specifically indicated for:

- direct filling of class I, II, III, IV, and V cavities (details see below)
- preventive resin restorations
- repair of composite / ceramic veneers
- blocking out of undercuts
- adhesive cementation of ceramic and composite restorations

SYNERGY D6 Dentin White Bleach is specifically indicated for:

- restoration of whitened teeth
- restoration of deciduous teeth
- characterization of chalk spots
- masking of discolored teeth

SYNERGY D6 Enamel Shades are specifically indicated for:

- 2 layer-technique, as enamel replacement in all classes
- reconstruction of incisal edges
- shape and color corrections to improve esthetics
- bonding of composite and ceramic restorations

Contra-indications

If the site cannot be isolated after enamel etching and during application and curing of SYNERGY D6. If allergic to components of SYNERGY D6. If oral hygiene is poor.

Side effects

No systemic side effects are known. Contact-allergies with products of similar composition have been reported in isolated cases.

Interactions with other agents

Agents which contain eugenol and / or oil of -cloves may affect the polymerization of SYNERGY D6. The use of zincoxide-eugenol cements in combination with SYNERGY D6 should therefore be avoided. Discolorations may occur when using cationic mouth rinses, plaque indicators or chlorhexidine.

Application

Cleansing the tooth

The tooth to be treated and the adjacent teeth are cleansed using a brush and prophy-paste which does not contain fluoride.

Selection of shade

Select shades before isolation. Ideally, the shade is determined in broad daylight using the SYNERGY D6 Shade Guide. Shades are identical to those of the shade guide only 24 hours after curing.

Isolation of the cavity (rubber dam)

Adequate isolation is absolutely necessary for achieving optimum results. The use of HYGENIC / Roeko Dental Dam is recommended.

Preparation of the cavity

When preparing the cavity, every effort should be made to use a technique that is gentle to the tooth substance (principle of Adhesive Restoration Technique). Prepare the enamel and dentine using 80 µm preparation diamonds and -finish using 25 µm finishing diamonds. Bevelled enamel margins are recommended to increase the area of adhesion between tooth and filling material, thereby optimizing marginal seal.

Pulp Protection

Covering the areas close to the pulp with hard-setting calcium hydroxide cements using the spot technique will provide protection of the pulp against bacterial infiltration.

Bonding system

Use COLTENE One Coat Bond, One Coat Self-Etching Bond or COLTENE A.R.T. BOND according to the corresponding instructions for use.

tions for use.

Matrix and interdental wedges

Apply a thin matrix band for class II, III and IV restorations. Fix the matrix proximally using interdental wedges.

Application of SYNERGY D6 from a syringe

Dose SYNERGY D6 directly onto the mixing pad, take up in small increments with -COLTENE Composite Instruments or any other application instrument, and apply to the cavity.

Application of SYNERGY D6 from Tips

Remove the cap. Insert the composite capsules through the barrel opening of the dispenser. Rotate the angled composite capsule into the desired position. Extrude SYNERGY D6 into the cavity or onto an instrument by exerting gentle, even pressure on the handle.

Working time

SYNERGY D6 is photosensitive, and should not be exposed to light too long, in particular to the operating light or sunlight. If possible, protect exposed SYNERGY D6 material by means of light opaque covering (not blue).

Polymerization

SYNERGY D6 can be cured using all common curing light units or LED (e.g. Coltolux LED).

Recommended exposure times:

Layer Thickness: 2 mm

	< 800 mW / cm ²	> 800 mW / cm ²
SYNERGY D6 Dentin White Bleach	30 s	20 s
SYNERGY D6 Dentin A1 / B1	30 s	20 s
SYNERGY D6 Dentin A2 / B2	30 s	20 s
SYNERGY D6 Dentin A3 / D3	30 s	20 s
SYNERGY D6 Dentin A3.5 / B3	40 s	20 s
SYNERGY D6 Dentin C2 / C3	40 s	20 s
SYNERGY D6 Dentin A4 / C4	40 s	20 s
SYNERGY D6 Bleach Opaque	40 s	20 s
SYNERGY D6 Enamel White Opalescent	20 s	20 s
SYNERGY D6 Enamel Universal	20 s	20 s

SYNERGY D6 must be cured layer by layer. Do not remove the inhibition layer since this would affect adhesion between the layers. In the event of underexposure there is a risk that the ideal strength values may not be achieved. Overexposure is not possible. Equipment whose light output is unknown should be checked with Coltolux Light Meter according to corresponding instructions for use.

Finishing procedures

Finishing consists of three stages: coarse finishing, fine finishing and polishing. Finishing diamonds (40 µm and 15 µm) are the most versatile and the least destructive. They should be used with very light pressure, with a constant wiping motion and a generous water spray. The ideal speed ranges between 5000 and 15 000 rpm. Flexible diamond files (80 µm, 40 µm and 15 µm) and strips are suitable for approximal surfaces.

For high gloss polishing results use Coltène/Whaledent DIATECH polishers or any comparable instruments. Fluoridize all treated surfaces after finishing.

Emergency measures

In case of direct contact with the oral mucosa, rinsing with tap water is sufficient. In the case of contact with the eyes, rinse thoroughly with water (10 min) and consult physician.


Note

Only supplied to dentists and dental laboratories or upon their instructions.

Keep out of the reach of children!

Do not mix different shades on the mixing pad, since this procedure will lead to air entrapment and porosities.

Shelf life and marking

The expiry date and  number are marked on the syringes and tips.

Storage

Store at 4 – 23 °C / 39 – 73 °F.
Avoid exposure to direct sunlight or other heat sources.

Caution

Federal law restricts this device to sale by or on the order of a dentist.

Infection control

Compliance with the following instructions ensures optimal hygienic conditions when using COLTENE SYNERGY D6:

- SYNERGY D6 tips are for single use only.
- Recap composite syringes after use.



0123



Glossary



Consult instructions for use



Keep away from sun light



Temperature limitation



Notified body registration number



Identification for Russia



Identification for Ukraine



Legal manufacturer



Single use only



Expiry date

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