



The Synergy of Colors

SYNERGY[®] Nano Formula

Revolutionary Handling and Color

Unrivalled Handling Properties

Excellent optical Blend-in properties

High gloss polishing within minimum time

SYNERGY® NANO FORMULA

The introduction of Synergy® in 1998 was the first Duo Shade concept in the dental industry. We have taken our formula one step further to keep pace with our customer's needs and requirements. Synergy® Nano Formula incorporates the advancement of spherical Nano-sized fillers. This provides superior handling, strength and blending-in properties.

NANO FORMULA PROVIDES: UNRIVALED HANDLING PROPERTIES

- non-sticky – ideal for sculpting
- condensable and sculpable composite
- excellent for all classes
- fully adaptable to the cavity base without air entrapment
- does not flow backwards on the placing instrument
- excellent marginal adaptation and contact points



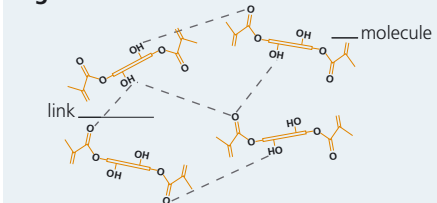
Restoration with SYNERGY® Duo Shade Nano Formula (Duo Shade A2 / B2). Modelling of natural anatomical contours possible due to the stable, non-sticky consistency. Reducing time needed for anatomical recontouring with finishing instruments.



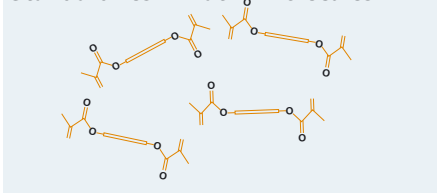
Typical anatomical shape result after using a self-leveling composite. Proper modeling of anatomical contours is limited!

NANO FORMULA

High cohesive molecular resin matrix



Standard resin matrix molecules



HCM RESIN MATRIX

- Remains sculpable at oral temperature
- Higher wear resistance than amalgam
- Same wear resistance as enamel

These unique features are possible because of the strong link that has been created between the resin molecules in the HCM (high cohesive molecular) resin matrix. The stronger link impedes the flow of the resin and enables the transmission of condensation or sculpting forces. This very dense matrix combines excellent abrasion resistance and lower polymerization shrinkage.

SUPERIOR HANDLING PROPERTIES, NON STICKY, SCULPTABLE CONSISTENCY

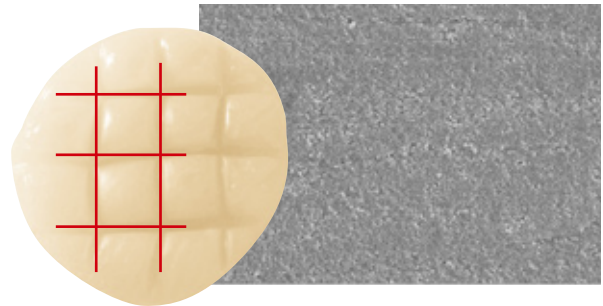
You make the comparison

Place composite on a mixing pad and section with an instrument. If material "drifts", proper sculpting of anatomical form, at intra-oral temperatures is not possible.

All SEM pictures - Mag. 400x



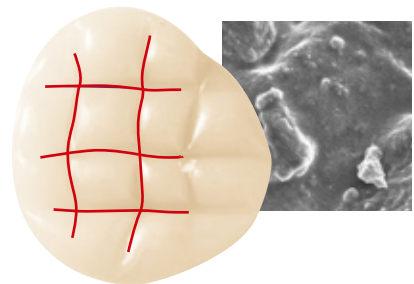
Restoration with SYNERGY® Compact Nano Formula (Duo Shade A3 / D3)



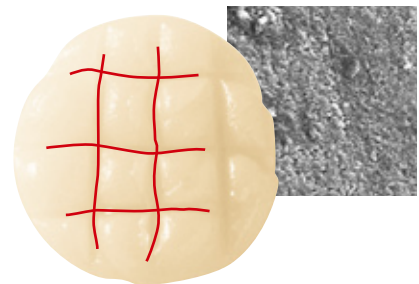
Synergy® Nano Formula
Consistency stays – does not level itself



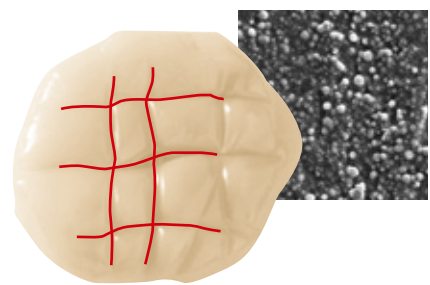
Typical occlusion shape result after using a self level-
ing sticky composite.



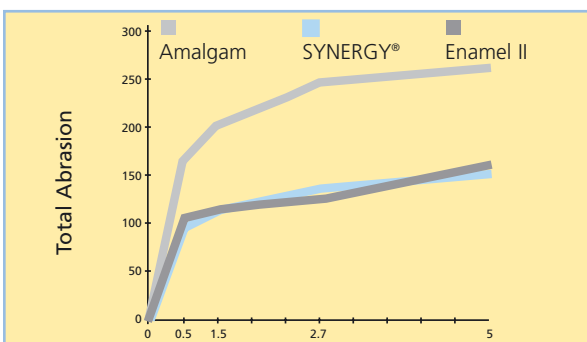
*Premise
Consistency does not stay – levels itself



*Tetric Ceram
Consistency does not stay – levels itself



*Filtek Supreme
Consistency does not stay – levels itself



* Filtek Supreme, Premise, Tetric Ceram are not Trademarks of Coltène/Whaledent

UNIQUE DUO SHADE SYSTEM FOR SIMPLIFIED SHADE SELECTION

Everyday situation in a dental office



The VITA™ Classic Shade Guide is often the base for determining shades. However choosing the correct shade can be difficult. Two or even three shades may be „close“.

Coltène/Whaledent has used this knowledge in developing the Duo Shade Concept.

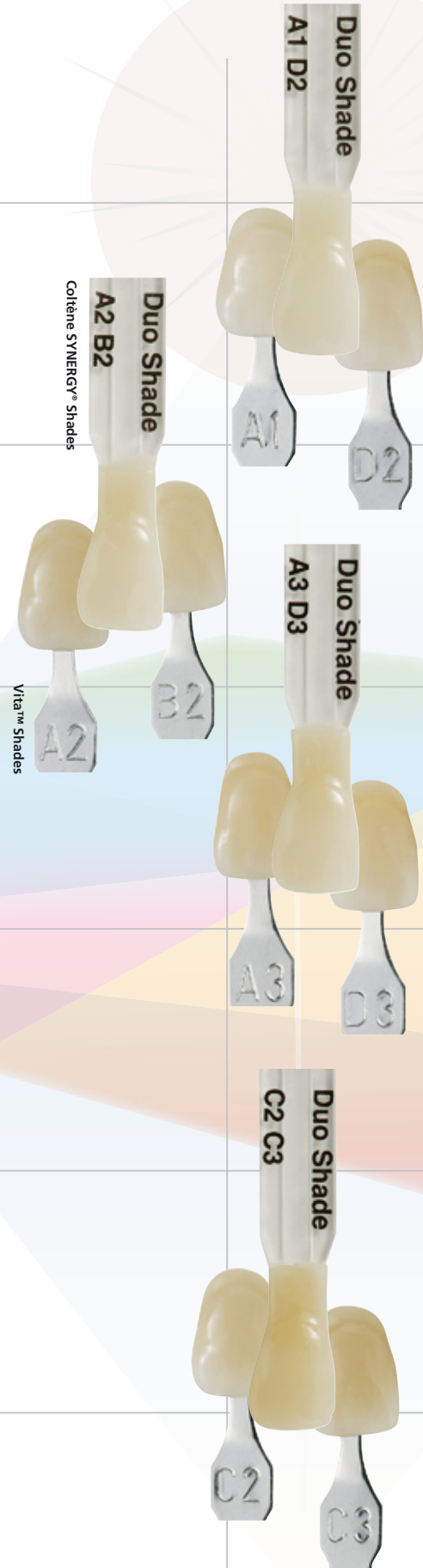
DEVELOPMENT

Our first step was to carry out color measurements of the Vita colors where we found that certain shades e.g. A2 and B2 exhibit only very slight variations within the color spectrum. Based on this research, the following „color couples“ were discovered: A1/D2, A2/B2, A3/D3, A3.5/B3, A4/M5, C2/C3.

A special light cabinet which can accurately reproduce all light situations (sunlight, daylight, UV and artificial light) was used to finetune translucency and color intensity to optimize the shades to perfect dual shading concept i.e. A2/B2 can be both Vita shade A2 and B2.



With this development we have successfully addressed the issue of easy, timesaving shade selection and economical material shade range/assortment



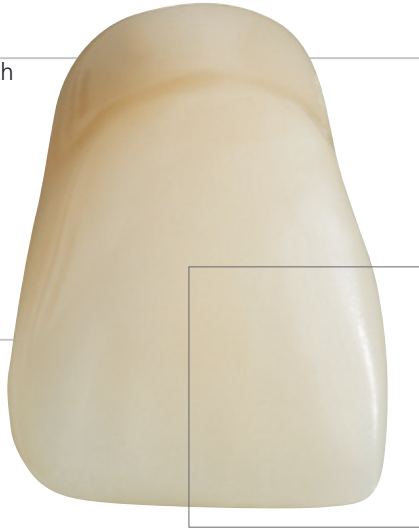
DUO SHADE CONCEPT

BEST OPTICAL BLEND-IN PROPERTIES...

Univeristy studies and in vivo tests confirm that in clinical situations, where sufficient tooth structure remains, the SYNERGY® Duo Shade concept will ideally reproduce the desired Vita shade!

Vita™ tooth

A2



Vita™ tooth

B2



Class IV Restorations on VITA™ A2 and B2 tooth with Synergy® Duo Shade Nano Formula A2 / B2 Shade

COMPETITOR CLASS IV RESTORATIONS ON VITA A2 TOOTH

Class IV restorations on Vita™ A2 tooth

Dentists are forced to rely on the composite manufacturers who insist their shades accurately match the Vita Shade guide. This is not always the case.



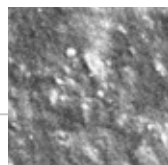
*Filtek Supreme A2

*Premise A2

*Tetric Ceram A2

...AND ENHANCED HIGH GLOSS POLISHING WITHIN MINIMUM TIME

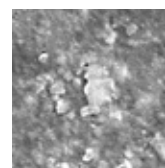
SEM pictures after polishing



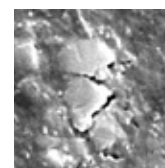
SYNERGY® Nano Formula shows due to the improved particle distribution significantly higher gloss values ($p < 0.05$) than other materials.



*Filtek Supreme A2



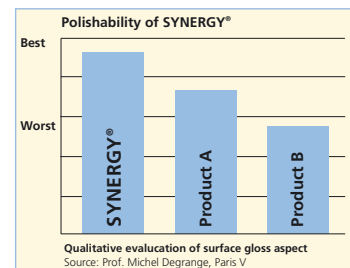
*Premise A2



*Tetric Ceram A2

All SEM pictures - Mag. 3000x (internal source)

* Filtek Supreme, Premise, Tetric Ceram are not Trademarks of Coltène/Whaledent



MATERIALS

SYNERGY® NANO FORMULA

SYNERGY®

MATERIAL

IMMEDIATE CONTAINER

Duo Shade



Compact



SuperWhite



Transparent



Flow



INDICATIONS

- direct filling of all teeth
- more translucent material in the layer technique
- bonding of composite and ceramic restorations

- direct filling of opaque teeth
- direct class V fillings
- core material in the layer technique

- restoration of whitened teeth
- restoration of deciduous teeth
- characterization of hypercalcifications
- masking of discolored teeth

- translucent surface layers in all classes
- reconstruction of incisal edges
- shape and color corrections to improve esthetics
- bonding of composite and ceramic restorations

- fillings of class V (cervical caries, root erosions, wedge-shaped defects)
- fillings in anterior teeth (class III, IV)
- small fillings in posterior teeth
- fillings of minimally invasive preparations
- repair of composite and ceramic veneers
- block out of undercuts
- adhesive cementing of composite and ceramic restorations
- preventive resin restorations

FEATURES

SYNERGY® DUO SHADE NANO FORMULA

Duo Shade has the consistency to provide accurate and easy contouring while maintaining the anatomy you create. Duo Shades are suitable for all clinical indications including veneers and provides the translucency for layering techniques. **Characteristics:** Duo Shades, translucent with the ability to subtly „blend-in“, fluorescent and radiopaque.

SYNERGY® COMPACT NANO FORMULA

The name conveys the nature of the product: dense and „packable“. Compact is used to fill deep molar cavities as well as restoration of opaque bicuspids, cervical areas, veneers or as a base material in layering techniques. **Characteristics:** Duo Shades, opaque, fluorescent and radiopaque.

SYNERGY® SUPER WHITE „N“ NANO FORMULA

Achieve the same beautiful contours as SYNERGY® Duo Shade with the advantage of super white shading. Suitable for matching bleached teeth, veneers and deciduous teeth. SYNERGY® Superwhite N is fluorescent and radiopaque.

SYNERGY® TRANSPARENT NANO FORMULA

SYNERGY® Transparent has the same excellent handling properties as SYNERGY® Duo Shade composite and is ideal for incisal edges while adding a natural vitality and a high gloss with layering techniques. It is fluorescent and radiopaque. It has the same filler load as the other SYNERGY® composites therefore, exhibiting the same physical properties.

SYNERGY® FLOW

SYNERGY® Flow is the perfect complement to all other SYNERGY® products with the same innovative chemistry. SYNERGY® Flow's revolutionary thixotropic formula enables you to fill the smallest cavities. It is flowable, but not runny and easily used even in the finest cavities.



Flows where you want it - when you want it!



CLINICAL CASE ANTERIOR

Mag. Dent. Mettler
Dental Office Dr. Wetzel, St.Gallen – Switzerland



Preoperative view



Preparation



Palatal view



Preparing Hygenic® rubberdam



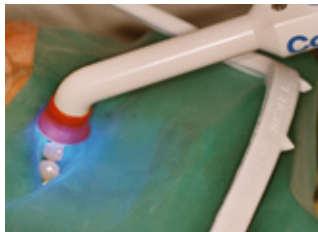
One Coat Self-Etching Bond



Applying Primer



Applying Bond



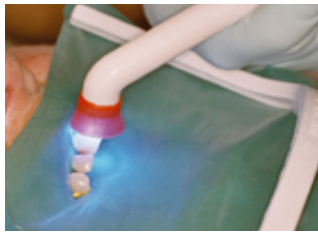
Polymerisation with Colt lux LED



Applying Synergy® Nano Formula



Placing Roeko® matrix band



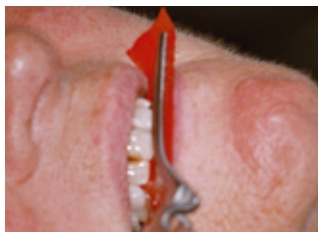
Polymerisation



Finishing



Using Roeko® polishing strips



Hanel® occlusion foil



High gloss polishing with Diatech Brushine



Result



CLINICAL CASE POSTERIOR

Dr. Schönemann, Augsburg –Germany



Preoperative view



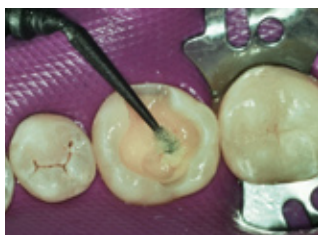
Preparation with Diatech bur



Prepared cavity



One Coat Self-Etching Primer



One Coat Self-Etching Bond



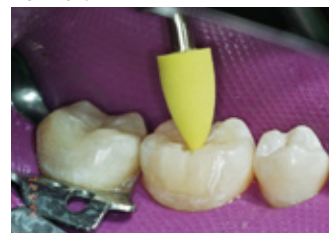
Applying Synergy® Nano Formula



Light curing



Polishing with Diatech Comprepol



Polishing with Diatech Comprepol



High gloss polishing with Diatech Brushine



Occlusion test with Hanel® Foil



Result

ORDER INFORMATION

SYNERGY® Nano Formula

7821	Duo Shade Syringes Refills (4g) A1/D2	1 pc.
7822	Duo Shade Syringes Refills (4g) A2/B2	1 pc.
7823	Duo Shade Syringes Refills (4g) A3/D3	1 pc.
7824	Duo Shade Syringes Refills (4g) A3.5/B3	1 pc.
7825	Duo Shade Syringes Refills (4g) A4/M5	1 pc.
7826	Duo Shade Syringes Refills (4g) C2/C3	1 pc.
7841	Duo Shade Syringes Refills (4g) Super White N	1 pc.
7847	Duo Shade Syringes Refills (4g) Transparent	1 pc.
7852	Duo Shade Syringes Refills (4g) A1/D2	10 pcs.
7853	Duo Shade Syringes Refills (4g) A2/B2	10 pcs.
7854	Duo Shade Syringes Refills (4g) A3/D3	10 pcs.
7855	Duo Shade Syringes Refills (4g) A3.5/B3	10 pcs.
7856	Duo Shade Syringes Refills (4g) A4/M5	10 pcs.
7857	Duo Shade Syringes Refills (4g) C2/C3	10 pcs.
7890	Duo Shade Syringes Refills (4g) Super White N	10 pcs.
7893	Duo Shade Syringes Refills (4g) Transparent	10 pcs.
7831	Duo Shade Tips Refills A1/D2	20 pcs.
7832	Duo Shade Tips Refills A2/B2	20 pcs.
7833	Duo Shade Tips Refills A3/D3	20 pcs.
7834	Duo Shade Tips Refills A3.5/B3	20 pcs.
7835	Duo Shade Tips Refills A4/M5	20 pcs.
7836	Duo Shade Tips Refills C2/C3	20 pcs.
7844	Duo Shade Tips Refills Super White N	20 pcs.
7848	Duo Shade Tips Refills Transparent	20 pcs.
7837	Compact Tips Refills A2/B2	20 × 0.25 g
7838	Compact Tips Refills A3/D3	20 × 0.25 g
7839	Compact Tips Refills A3.5/B3	20 × 0.25 g
7490	Compact Syringe Set	
	SYNERGY® Compact A2/B2, A3/D3	2 × 4 g
	One Coat 7.0	1 × 5 ml
	Direct Posterior Rest. Box	
	5 diamond instruments	

Accessories

7605	SYNERGY® Shade Guide
7590	Dispenser Tips

SYNERGY® Flow

8460	SYNERGY® Flow Intro Kit	
	SYNERGY® Flow	
	A2/B2, A3/D3, A3.5/B3, A4/M5, Super White	5 × 2.3 g
	Bent Application Needles	40 pcs.
8462	System Set	
	SYNERGY® Flow Intro Kit Art. No. 8460	1 pc.
	One Coat Bond Kit Art. No. 7880	1 pc.
8450	SYNERGY® Flow Refills A2/B2	1 × 2.3 g
8451	SYNERGY® Flow Refills A3.5/B3	1 × 2.3 g
8452	SYNERGY® Flow Refills A3/D3	1 × 2.3 g
8453	SYNERGY® Flow Refills A4/M5	1 × 2.3 g
8454	SYNERGY® Flow Refills Super White	1 × 2.3 g
8469	Bent Application Needles	20 pcs.



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