

ZENIT

Nano Ceramic Composite

Pres-maximum durability
with 480 Megapascals
with best suited for anterior
composite layer technique ...



Made
in
Germany
-best quality
-high standards



> Zenit Nano Ceramic Composite

Nano Composite is a light-curing, high-lustre-polish hybrid composite with an ultrafine, radiopaque porcelain filler for use in adhesive filling treatment. It can be polished to a high lustre. Due to the ultrafine particle filler, extremely homogeneous restorations can be placed which are easily polished to a high lustre. The chameleon effect matches the shade of the filling perfectly to the tooth structure. The guidelines in DIN EN ISO 24049 have been complied with. Nano Composite is supplied in practical screw syringes.

Monomer Matrix: Diurethane dimethacrylate, butanediol dimethacrylate, isopropylidene-bis [2(3)-hydroxy-3(2) - (4-phenoxy) propyl] bismethacrylate.

Total filler content 83% by weight (70% by volume)

- Glass filler (medium grit size 0.7 microns)
- Pyrogenic silica (medium grit size 12 nm)
- Agglomerated nanoparticles (medium grit size 0.6 microns)



> Technical Data

Vickershardness	: 1088 Mpa
E-Modul	: 18154 Mpa
Compressive strength	: 462 Mpa
Flexural strength	: 152 Mpa
Tensile strength	: 66 Mpa
Shrinkage vol	: 1,83%
Radiopacity	: 220%Al



clinical case from Dr. Jerry Sav / China

> Benefit from

- Excellent handling properties
- Ultrafine filler
- Extremely homogeneous restorations
- Excellent polishability
- Shade of the filling matches the tooth structure

> Scratch resistant filling surface

- Very good polishing behavior
- Nano Composite feels smooth on the tongue
- Low absorption of water
- Color-stable
- No discoloration

Nano Composite is fat- and waterresistant, repels dyes

• **Resistant against coffee, tea, red wine and cosmetics. Why?**

"Nano technology prevents penetration of external coloring materials, creates smooth, dense surfaces and repels color particles and dirt."

Fraunhofer - Institut

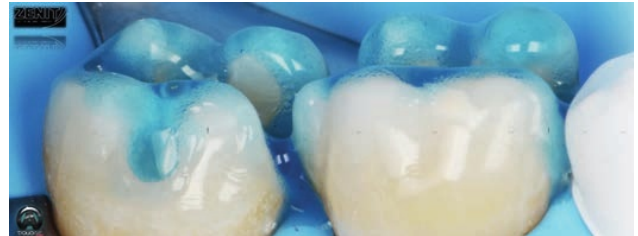
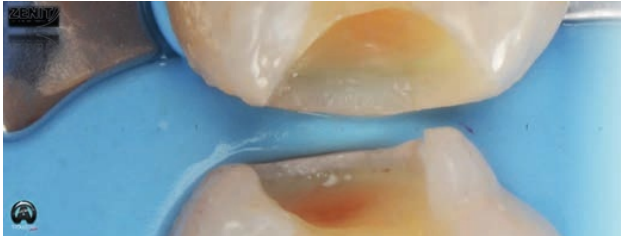


clinical case from Dr. Pasquale Venuti / Italy

> Wide Range Shade

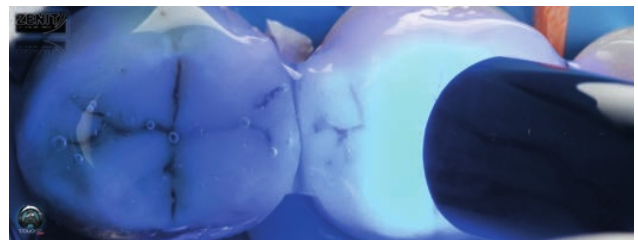
- Enamel Shades : W2 (white), W3 (transparent)
- Effect Shades : ER (red)
- Dentin Shades : A1, A2, A3, A3.5, A4, B1, B2, B3, C2, C3, D3
- Opaque Dentin : ODA2, ODB2
- Universal Shade : UD (Universaldentin)

Vita scale was applied. Vita Bad Sackingen, Vita Zahnfabrik H. Raut is in Germany GmbH & Co KG is a registered trademark.



> Composition

- **Monomer Matrix:** Diurethane dimethacrylate, butanediol dimethacrylate, isopropylidene-bis [2(3)-hydroxy-3(2) - (4-phenoxy) propyl] bismethacrylate.
- Total filler content 83% by weight (70% by volume)
 - Glass filler (medium grit size 0.7 microns)
 - Pyrogenic silica (medium grit size 12nm)
 - Agglomerated nanoparticles (medium grit size 0,6 microns)



> Indications

- Direct anterior and posterior restorations in all cavity classes
- Indirect restorations such as inlays, onlays, veneers
- Extended fissure sealing in molars and premolars
- Cores
- Adjusting contours and shade to improve aesthetics



posts of this week
Dr. Özgür Torun / Turkey



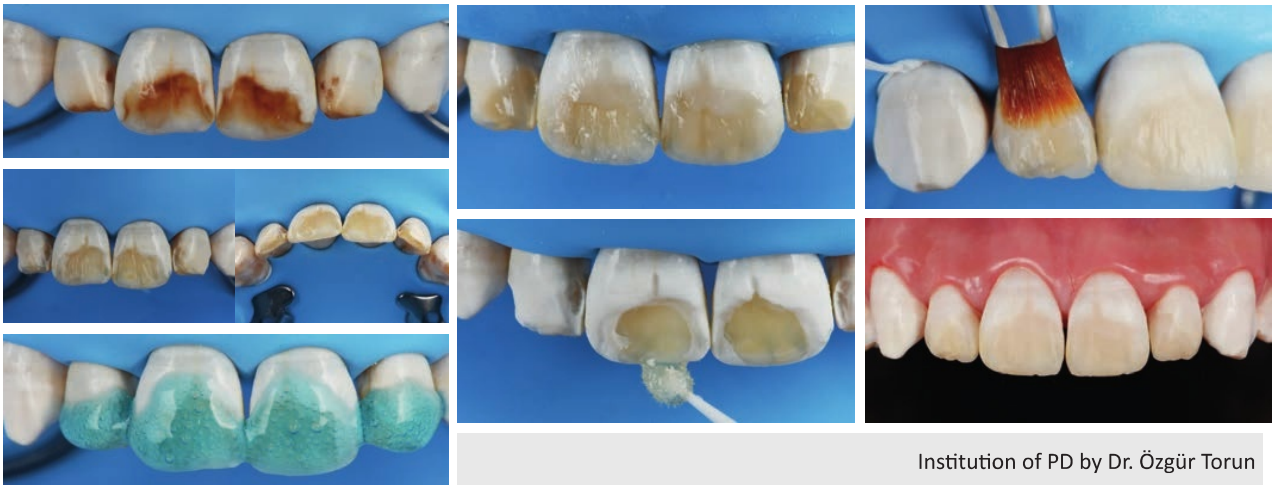
> High mechanical strength

	ZENIT Nano Composite	3M Filltek Supreme	Heraeus Kulzer Venus Diamond CO	VOCO Grandiose A3
Vickers Hardness (MPa)	1088	862	816	891
3-Points Strength (Mpa)	18154	14245	15500	18384
Young's modulus (MPa)	152	167	163	144
Compression strength (MPa)	462	465	459	413
Batch	Gold 10-9	N111327	10023	950072

All data from internal measurements, PD Labs Jan 2014



clinical case from Dr. Anar Kerim / Azerbaijan



Institution of PD by Dr. Özgür Torun

> Abrasion Resistance

- Loss of only 60 microns of Nano Composite material after 200,000 mastication cycles in a mastication simulator
- **Result: more occlusal force in vitro than in conventional hybrid composites**

> Less Shrinkage

- less polymerization shrinkage
- 1,83% average total
- Reduces danger of gaps

- Nano Composite reduces the tensions in the filling
- Thanks to nano-agglomerates, the polymerization shrinkage is decreased
- Therefore, there is less stress in the filling

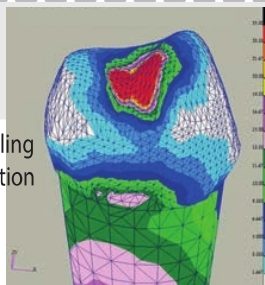


Photo courtesy of: Prof. Kunzelmann, University of Munich



clinical case from Dr. Vladyslav Tolkachev / Ukraina

LIST OF PRODUCT

PRD.01.10001ZN00	Zenit Nano Ceramic Compozite Set 7x40gr	PRD.01.10001ZN09	Zenit Nano Ceramic Compozite Refill C2 4gr
PRD.01.10001ZN01	Zenit Nano Ceramic Compozite Refill A1 4gr	PRD.01.10001ZN10	Zenit Nano Ceramic Compozite Refill C3 4gr
PRD.01.10001ZN02	Zenit Nano Ceramic Compozite Refill A2 4gr	PRD.01.10001ZN11	Zenit Nano Ceramic Compozite Refill OA2 4gr
PRD.01.10001ZN03	Zenit Nano Ceramic Compozite Refill A3 4gr	PRD.01.10001ZN12	Zenit Nano Ceramic Compozite Refill OB2 4gr
PRD.01.10001ZN04	Zenit Nano Ceramic Compozite Refill A3.5 4gr	PRD.01.10001ZN13	Zenit Nano Ceramic Compozite Refill W2 4gr
PRD.01.10001ZN05	Zenit Nano Ceramic Compozite Refill A4 4gr	PRD.01.10001ZN14	Zenit Nano Ceramic Compozite Refill W3 4gr
PRD.01.10001ZN06	Zenit Nano Ceramic Compozite Refill B1 4gr	PRD.01.10001ZN15	Zenit Nano Ceramic Compozite Refill UL 4gr
PRD.01.10001ZN07	Zenit Nano Ceramic Compozite Refill B2 4gr	PRD.01.10001ZN16	Zenit Nano Ceramic Compozite Refill ER 4gr
PRD.01.10001ZN08	Zenit Nano Ceramic Compozite Refill B3 4gr	PRD.01.10001ZN17	Zenit Nano Ceramic Compozite Refill UD 4gr