Inorganic ceramic filler bodies have diameters of 5 to 20 millionths of a millimetre (1 nm - 10^{-9} m).

Nanotechnology increases the density of the material. The proportion of ceramic filler bodies in the polymerised material increases to 83% by weight. The resin content is reduced at the same time.

The nanostructure increases the surface of the silanised particles by a factor of 10,000. This distributes the pressure load over much greater areas. The ceramic nanoparticles are networked to an agglomeration. This increases the mechanical strength.
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 ultra-fine 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.

**Composition**

- Monomer Matrix: Diurethane dimethacrylate, butanediol dimethacrylate, isopropylide-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**

- Vickers hardness: 1088 Mpa
- E-Modul: 18154 Mpa
- Compressive strength: 462 Mpa
- Tensile strength: 152 Mpa
- Shrinkage vol: 1.83%
- Radiopacity: 220% Al

**Indications**

- Direct anterior and posterior restorations in black's class I, II, III, IV and V cavities.
- Indirect restorations such as inlays, onlays and laminate veneers.
- Extended fissure sealing in molars and premolars.
- Cores.
- Splinting mobile teeth.
- Adjusting the contours and shade to improve aesthetics.

**Shades**

- Refill 4 gr syringe

**Kit Content**

- 7 x 4gr Syringe (A1, A2, A3, A3.5, B2, A2O, W2)
- 1 x 5ml Prebond (5th Generation Adhesive System)
- 1 x 3ml Etching Gel
- 1 x 2gr Dynamic Flow Refill A2 shade
- 1 x 1 pcs shade guide
- 1 x 50 pcs applicator
- 1 x 4 pcs mixing well
- User guides

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**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 ultra-fine 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.

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- 1 x 4 pcs mixing well
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**Light-curing nano ceramic composite with outstanding physical properties and optimized handling for direct restorations of all cavity classes as well as indirect restorations such as inlays and onlays.**