.xcellent adaptation and sculptability

ceram.x® SphereTEC™ one
Universal Nano-Ceramic Restorative

The unique SphereTEC™ technology takes handling comfort to the next level.

• Ingenious simple shading system: 5 shades to cover the full VITA®[1] range
• Fast and easy polishing for outstanding gloss
• Natural esthetics

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ceram.x® SphereTEC™ one

.xceptional
handling

A new filler technology containing granulated spherical fillers in combination with an optimised resin matrix system results in preferred handling properties:

• adapts easily to cavity surfaces
• doesn't stick to hand instruments
• easy to sculpt
• slump resistant

.xplore the novel filler technology
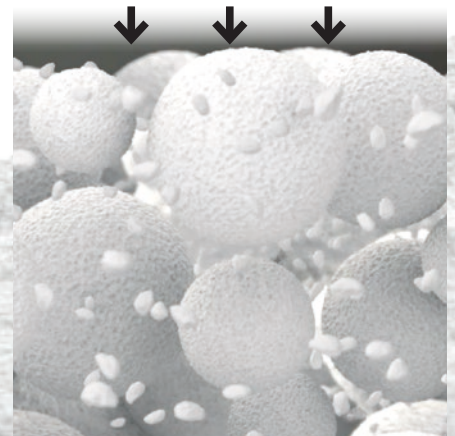## SphereTEC™

Watch now!

ceram.x® SphereTEC™ one is based on the advanced granulated filler technology SphereTEC™ which is patent applied. SphereTEC™ stands for the process of manufacturing microscaled, well-defined spherical superstructures, comprising of submicron glass. The SphereTEC™ fillers' morphology, particle size distribution and surface micro-structure are key for the enhanced handling comfort and esthetic outcome.

20 μm
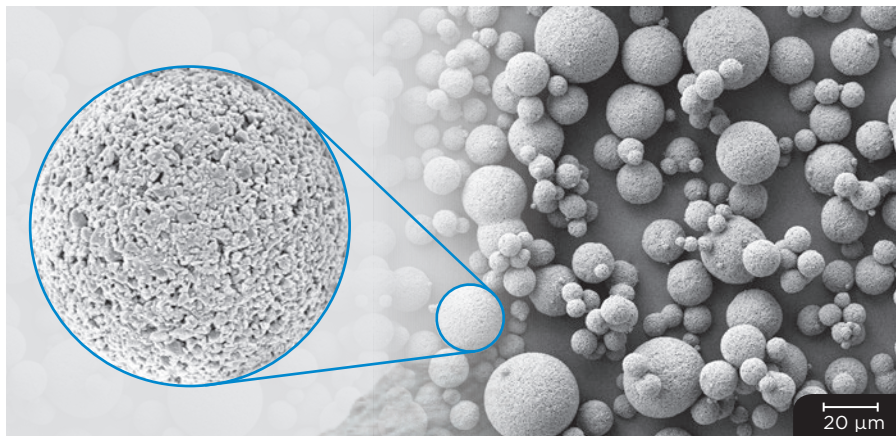
Microstructured surface of a SphereTEC™ filler (d3.50 ~ 15 μm), obtained via spray-granulation process from submicron glass fillers.

SEM picture showing SphereTEC™ spherical prepolymerised fillers providing a ball-bearing effect that enables excellent adaptation and sculptability.

The micro-granulated structure of SphereTEC™ is able to bind more free resin compared to usual fillers. Therefore ceram.x® SphereTEC™ one does not stick to hand instruments.

Dr. Wilhelm Bestler, Germany
"Perfect shade match and optimum sculptability at the same time!"

.xtremely simple

CLOUD shade concept

The new CLOUD shade concept is designed to achieve shade match with the full range of VITA[1] shades with a minimised number of universal shades. ceram.x® SphereTEC™ one contains five CLOUD shades of moderate translucency named A1 to A4.[2]

- 5 CLOUD shades cover the full VITA[1] range
- Reliable shade match thanks to a distinct chameleon effect
- Smart i-shade label for a quick translation into VITA[1]

VITA[1]	A1 B1 C1	A2 B2 D2	A3 C2 D3 D4	A3.5 B3 B4 C3	A4 C4
CLOUD shade	A1	A2	A3	A3.5	A4
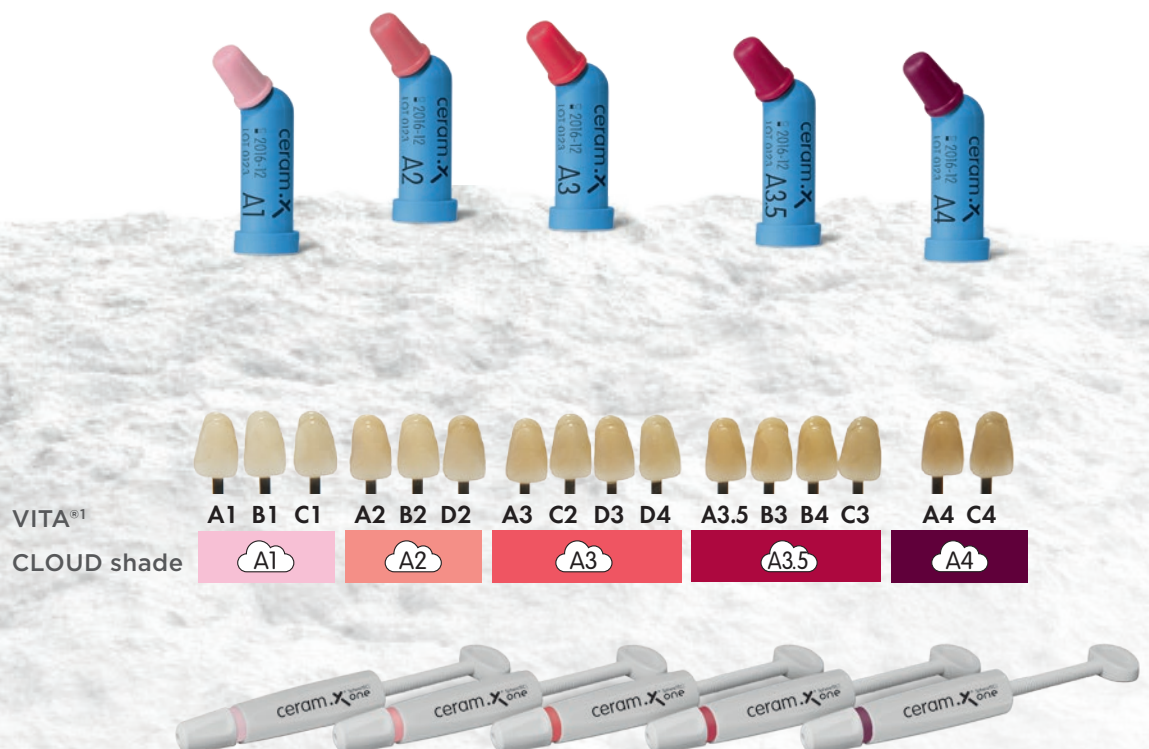
[1] VITA® is not a registered trademark of Dentsply Sirona.
[2] Additionnally a Bleach White shade is available in Compules® Tips for the restoration of bleached teeth!

ceram.x® SphereTEC™ one –
The universal nano-ceramic
composite for all cavity classes

.xperience the

fast and easy polishing

ceram.x® SphereTEC™ one provides a fast and easy polishing procedure
with both, silicon based polishers and abrasive discs, resulting in an out-
standing gloss.[1]
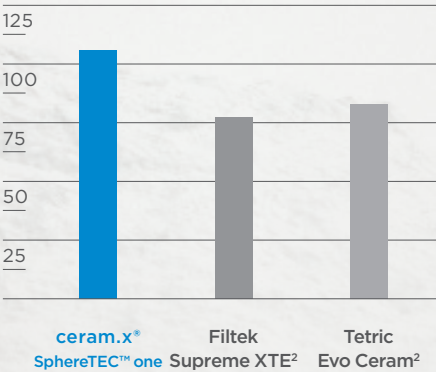
After preparation

After finishing

After 20 sec. polishing

.xtra strong for

long lasting restorations

ceram.x® SphereTEC™ one is an ideal universal composite for durable stress bearing posterior restorations.

FLEXURAL STRENGTH[1]	FRACTURE TOUGHNESS[1]	LOCALISED WEAR – MAXIMUM DEPTH[1]
4-point bending after 2 weeks water storage MPa	MPa m$^{0.5}$	µm

ceram.x®
SphereTEC™ one   Filtek
Supreme XTE²   Tetric
Evo Ceram²

**ceram.x®
SphereTEC™ one** Filtek
Supreme XTE² Tetric
Evo Ceram²

**ceram.x®
SphereTEC™ one** Filtek
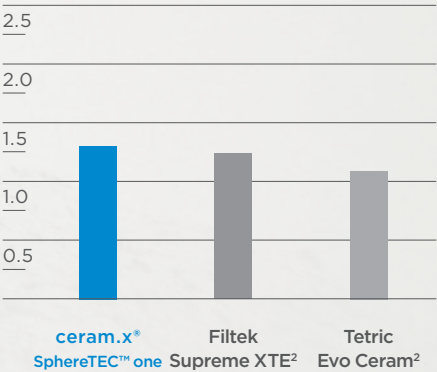Supreme XTE² Tetric
Evo Ceram²

Lohbauer U and Belli R, 2015

High flexural strength is considered by
international standards to be an important
mechanical property for posterior
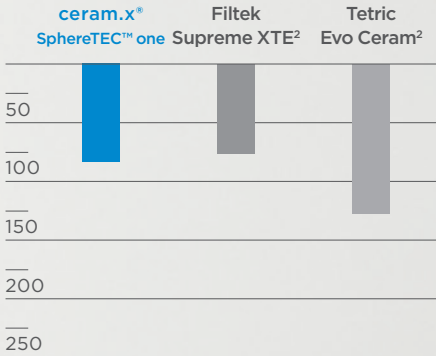restorations bearing occlusal stress.

Lohbauer U and Belli R, 2015

High fracture toughness is needed to resist
propagation of cracks in the material and
improves longevity of a restoration.

Latta MA, 2015

Low loss of material is beneficial in occlusal
contact areas under chewing forces for a
stable occlusion.

[1] Data on file; available upon request, see contact details.
[2] Not a registered trademark of Dentsply Sirona.

Dr. Ariane Douvier, France
"Excellent handling and modelling,
great mimetic effect!"

.xcellent

esthetics made easy

The new ceram.x® SphereTEC™ one is a universal composite for all cavity classes in the anterior and posterior region. Its distinct chameleon effect allows for a precise and reliable shade match resulting in highly esthetic restorations with one single translucency.

Anterior restoration

Before

After restorations with ceram.x® SphereTEC™ one A3 from 32 to 43.

Ian Cline, UK

Posterior restoration
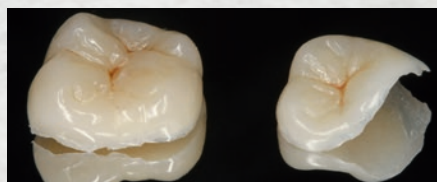

Tooth 36 with an occlusal caries lesion.

Restoration with ceram.x® SphereTEC™ one A2 giving the tooth back its lost anatomy and natural esthetic appearance.

José Bahillo, Spain

Indirect restoration

SDR® placement and preparation.

Indirect restoration with ceram.x® SphereTEC™ one A2.

Indirect restoration on 26 and 27 after cementation and polishing.

Manuel Pinon, Spain

For clinical situations, where two translucencies are required, ceram.x® one DENTIN & ENAMEL is recommended.

Ordering Information

ceram.x® SphereTEC™ one Syringe Intro Kit   607.01.620
5 Syringes 3 g each (A1; A2; A3; A3.5; A4)
1 Bottle prime&bond® one SELECT 2.5 ml, Accessories

ceram.x® SphereTEC™ one Compules® Tips Intro Kit   607.01.630
24 Compules® Tips (0.25 g each), Compules® Tips Gun,
i-Shade Label, IFU, ITG, shade guide voucher

ceram.x® SphereTEC™ one Syringe Refills

Shades	1 Syringe 3 g/Refill
A1 (= VITA®[1] shades A1; B1; C1)	**607.01.621**
A2 (= VITA®[1] shades A2; B2; D2)	**607.01.622**
A3 (= VITA®[1] shades A3; C2; D3; D4)	**607.01.623**
A3.5 (= VITA®[1] shades A3.5; B3; B4; C3)	**607.01.625**
A4 (= VITA®[1] shades A4; C4)	**607.01.624**

ceram.x® SphereTEC™ one Compules® Tips Refills

Shades	12 Compules® Tips 0.25 g/Refill
A1 (= VITA®[1] shades A1; B1; C1)	**607.01.631**
A2 (= VITA®[1] shades A2; B2; D2)	**607.01.632**
A3 (= VITA®[1] shades A3; C2; D3; D4)	**607.01.633**
A3.5 (= VITA®[1] shades A3.5; B3; B4; C3)	**607.01.635**
A4 (= VITA®[1] shades A4; C4)	**607.01.634**

[1] VITA® is not a registered trademark of Dentsply Sirona.

Technical Data

Property	ISO 4049	ceram.x® SphereTEC™ one
Compressive strength	–	400 MPa
Flexural strength	> 100	135 MPa
Flexural modulus	–	8.5 GPa
Vickers hardness (VH5/10s)	–	60
Filler content (weight/volume)**	–	up to 79 wt.-% /up to 61 vol.-%*
Shrinkage (Archimedes)	–	2.3 vol-%
Water absorption	$\leq$ 40 µg/mm^3	16.8 µg/mm^3
Water solubility***	$\leq$ 7.5 µm/mm^3	-0.2 µg/mm^3
Curing time 2 mm 500 mW/cm^2		20 s
800 mW/cm^2	–	10 s
Sensitivity to ambient light (10,000 lx)	> 60 s	130 s
Radiopacity	$\geq$ 2 mm eq. Al	2.3 mm eq. Al

*   Inorganic filler content: 72-73 wt.-%/48-50 vol-%
**   SphereTEC™ and conventional filler as well as ytterbium fluoride; content varies ± 2 % among shades
*** Negative value due to very low solubility and remaining absorbed water

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