SimpliShade[™]

Simplified Universal Composite System

SimpliShade, powered by Adaptive Response Technology, covers all 16 VITA® classical shades with just 3 shades. Simplify your inventory management and save yourself time on shade selection while having the confidence in premium handling qualities and highly esthetic restorations. Keep your patients confidently smiling while keeping your workflow simple with SimpliShade.

See what dentists are saying about SimpliShade!



Your Premium Dental Partner



DR. SCOTT COLEMAN • DDS, MAGD • HOUSTON, TX



"It really did surprise me with its ability to blend very well with both incisal edge and surrounding tooth structure."



"A case like this is fairly common in a general practice, teeth break for a variety of reasons. A practitioner has no way of knowing what to expect when a patient calls with a "broken tooth". It is extremely helpful to have a simplistic way to restore the tooth immediately. Time is critical, you may not have the appropriate amount of time scheduled initially, because you do not know what it will take to restore the tooth until you have examined it. Having a simple, quick process to restore the tooth either permanently or provisionally is essential.

Upon seeing the patient and realizing this is a case of a dissatisfied smile, there were several options that this patient had in fixing the problem resented. We decided to use SimpliShade as a long term restoration for her. It was restored within 30 minutes and the patient was ecstatic. It fit our time schedule and esthetic results that we are known for.

There are many composite options in the market to create esthetic results, but would have taken longer and we would have charged more for the time required to place the multiple layers. From a pedestrian point of view, the difference in the final results between Harmonize and SimpliShade would not have justified the difference in financial cost as well as time. The durability of the material is an unknown for me, we will have to see how it holds up. As long as we can get several years' worth of function out of it I would consider it to be successful. There are longer lasting materials that could have been used at a much higher price point for the patient.

Every case is unique with a unique solution that needs to be decided on between the patient and the doctor. It is great to have a tool like SimpliShade in your tool box when you are deciding what is the best way to fix a problem specific to the patient. The more tools that you have to draw from, the better the end result will be for each patient."

DR. TETSUJI AOSHIMA • DDS • JAPAN



level of exceptional handling properties from SimpliShade as Harmonize, which I've been using for can mold and sculpt The polishability is excellent – I can obtain a beautiful gloss in a short time. As a SimpliShade, I like technology that offers highly esthetic patients."

UNIVERSAL OPAQUE & MEDIUM





before

CR removal and prep





pretreatment

using universal opaque





using medium

using medium





using medium

restoration complete



DR. MATTHEW MILLER • DDS • HUNTERSVILLE, NC



"I love that
SimpliShade gives
me lifelike results
quickly and easily
so I don't have
to use multiple
layered shades and
take more time to
complete... Thanks
for simplifying
my workflow with
SimpliShade."





DR. ROBYN B. LESSER • DMD, PA • TAMPA, FL

IGHT









"I have tried multiple brands of composite and restorative materials throughout my practice. I have never been thrilled with any of them. The composites felt sticky and would pull up when packing, the glass ionomers were too flowable and not able to shape before curing. I tried Kerr's SimpliShade, and the color match for my pediatric population is perfect every time. I think I have found my new favorite composite."

SimpliShade™ Technical Bulletin



DESCRIPTION

SimpliShade is a highly-filled nanohybrid universal composite that Kerr developed to simplify inventory management and save clinicians time on shade selection, while providing premium handling qualities and highly esthetic restorations.

It features low shrinkage, strength and durability for posterior restorations and outstanding color match, polishability, gloss retention and blending ("chameleon effect") for anterior restorations.

The filler proportions and morphology contribute to ideal handling characteristics, also aided by a rheological modifier that provides an enhanced thixotropic effect when sculpting. SimpliShade is available in three composite shades (Light, Medium, Dark) and two special shades (Bleach White and Universal Opaque). The special shades will be minimally used in extreme restorative cases: the Bleach White can be used in very white or bleached teeth; while the Universal Opaque would be used as the first increment (0.5 - 1.0 mm thick) for blocking discoloration or masking staining and then be covered with one of the three main shades.

INORGANIC FILLER SYSTEM

The primary filler in SimpliShade is composed of spherical silica and zirconia particles formed from a molecular suspension. This manufacturing method permits precise control over the size and shape of the system components.

In addition to the nanoscale filler, SimpliShade also contains 400 nanometer barium glass particles. This gives SimpliShade an effective particle range of 5 - 400 nanometers. This combination helps provide strength, polishability, radiopacity, wear resistance and ideal viscosity and handling.

A.R.T. FILLER SYSTEM

SimpliShade features Adaptive Response Technology (ART), also found in Harmonize™ – elements of the filler system which have two components. First, the zirconia and silica nano-particles are in an arrangement that imparts special optical properties.

More specifically, it permits light diffusion characteristics that are like human enamel. Enamel tends to reflect

or transmit more diffuse light at shorter wavelengths (i.e. - blue) and more collimated or specular reflection/ transmission at longer wavelengths (i.e. - red). The zirconia/silica nano-particles work together to mimic this characteristic, which provides better restoration blending, commonly known as the "chameleon effect". In this sense, SimpliShade adapts to the light wavelength to improve the esthetic outcome - a feature completely unique to this material.

The second component of the ART filler system is a rheological modifier, which acts as a stabilizing network if left undisturbed. Under this condition, the apparent viscosity of the material is higher, which prevents material creep, commonly known as "slump".

If any energy source is applied to the composite material, such as that from a sculpting instrument, the attractive forces that create the stabilizing network are temporarily broken, and the apparent viscosity is reduced. This makes the material softer and easier to carve, yet it remains non-sticky due to the high proportion of filler to resin. In this sense, the filler system is adaptive to the action of the operator, helping to eliminate some of the typical challenges associated with defining and maintaining proper restoration anatomy.

INORGANIC FILLER SUMMARY

Fill ratio by weight	~81%
Fill ratio by volume	~64.5%
Smallest primary particle size	~5 nanometers
Largest primary particle size	~400 nanometers
Average particle size	~50 nanometers

ORGANIC RESIN SYSTEM

SimpliShade contains the following resin components
BisGMA - Provides strength
BisEMA - Controls volumetric shrinkage
TEGDMA - Provides viscosity control

SHADE GUIDE CHART

Composite Shades	VITA' Shade Guide Equivalent
Light - LT	A1, B1, B2, C1, D2
Medium - MD	A2, A3, C2, D3, D4
Dark - DK	A3.5, A4, B3, B4, C3, C4

SIMPLISHADE PHYSICAL CHARACTERISTICS

Volumetric Shrinkage (%)	1.96
Flexural Strength (MPa)	140
Fracture Toughness (MPa *m ^{1/2})	1.41
Compressive Strength (MPa)	366
Flexural Modulus (GPa)	14.1
Diametral Tensile Strength (MPa)	56
Polishability (gloss units)	79
Gloss Retention (gloss units)	73
Radiopacity (%AI)	~290
Maximum Incremental Layer Thickness (mm)	
Light, Medium, and Bleach White Shades	2.0
Dark Shade	2.0
Universal Opaque	1.5
Recommended Curing Time (seconds) Optilux™ (or light with output 650 - 1000 mW/cm²)	
Light, Medium, and Bleach White Shades	20
Dark Shade	40
Universal Opaque	40
Recommended Curing Time (seconds) Demi™ Ultra / Demi™ Plus (or light with output >1000 mW/cm²)	
Light, Medium, and Bleach White Shades	10
Dark Shade	20
Universal Opaque	20

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Ordering Information

37001	Syringe, Light	37006	Unidose 20 Pack, Light
37002	Syringe, Medium	37007	Unidose 20 Pack, Medium
37003	Syringe, Dark	37008	Unidose 10 Pack, Dark
37004	Syringe, Bleach White	37009	Unidose 10 Pack, Bleach White
37005	Syringe, Universal Opaque	37010	Unidose 10 Pack, Universal Opaque

Testimonials

"My go to for most restorative procedures.

The handling is real good compared to similar products I have used."

- Dr. Rashpal Deol, San Ramon, CA, USA

"I was amazed at the chameleon effect of this composite to match the tooth!"

- Dr. Bobby Bramblett, Leeds, AL, USA

Visit Go.Kerrdental.com/Simplishade for more information.

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References:

1. In-vivo field evaluation. Data on file

