

The image features a blue background with a diagonal light flare. The Kuraray logo is in the top left. The background is decorated with faint, repeating geometric patterns of interlocking lines and stylized crosses.

kuraray

DENTAL PRODUCTS
RESOURCE GUIDE

TABLE OF CONTENTS

Kuraray, Then and Now

Company History	4
Kuraray's Integrated System	6
Kuraray's Patented Monomers	8

Adhesive Products

The Kuraray Line of Adhesives	10
Bonding System Product Chart	12
Total-Etch vs. Self-Etch	14
CLEARFIL™ Universal Bond	16
CLEARFIL™ SE BOND 2	18
CLEARFIL™ SE BOND	20
CLEARFIL™ SE Protect	22
CLEARFIL™ S3 (TRI-S) BOND PLUS	24
CLEARFIL™ DC BOND	26
CLEARFIL™ LINER BOND 2V	28
CLEARFIL™ PHOTO BOND	29
CLEARFIL™ NEW BOND	30
CLEARFIL™ DC ACTIVATOR	31
CLEARFIL™ CERAMIC PRIMER	32
CLEARFIL™ PORCELAIN BOND ACTIVATOR	33
ALLOY PRIMER	34

Cement Products

The Kuraray Line of Resin Cements	35
Resin Cement Product Chart	36
PANA VIA™ SA Cement Plus	38
CLEARFIL™ ESTHETIC CEMENT EX	40
PANA VIA™ F 2.0	42
PANA VIA™ 21	44

Restorative Composite Products

The Kuraray Line of Restorative Composites	45
Restorative Composite Product Chart	46
CLEARFIL MAJESTY™ ES-2 Classic	48
CLEARFIL MAJESTY™ ES-2 Premium	49
CLEARFIL MAJESTY™ Technique Guide	50
CLEARFIL MAJESTY™ ES Flow	52
CLEARFIL MAJESTY™ Flow	53
CLEARFIL MAJESTY™ Posterior	54
CLEARFIL™ AP-X	55
CLEARFIL™ ST Opaquer	56
SURFACE COAT™	56

Core Build-up Products

The Kuraray Line of Core Build-up Materials	57
CLEARFIL™ DC CORE PLUS	59
CLEARFIL™ PHOTO CORE	60
CLEARFIL™ CORE NEW BOND	62

Preventive Products

TEETHMATE™ DESENSITIZER	63
TEETHMATE™ F-1	64

Additional Products and Accessories

CLEARFIL™ REPAIR Multi Purpose	65
K-ETCHANT Syringe	66
K-etchant GEL	66
Caries Detector	66
Accessories	67

Appendix

Note, Warranty & Contact	69
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Technologies for Humanity

Kuraray was established in 1926 in Kurashiki, Japan, as an industrial producer of synthetic fibers. Kuraray's founder, Magosaburo Ohara, was active in social and cultural philanthropy, as well as business. Among his many achievements, he improved labor conditions for his employees; opened the company's medical clinic to people of the surrounding area; helped to fund an orphanage; and established a museum of art.

Over 80 years later, Kuraray continues to place the greatest value on expanding its business in a way that positively impacts people around the world and the environment. The company's commitment to social responsibility and focus on philanthropy has resulted in a legacy of technologies to benefit humanity, ranging from synthetic resins and non-woven fabrics to man-made leather and medical products. Through intensive research and development, Kuraray continues to lead the industry in technological breakthroughs in chemical engineering and polymer and synthetic chemistry.

Kuraray manufactures the products that make today's innovations possible. Some of Kuraray's life-changing technologies include:

- Food packaging materials.
- Base film for polarized film, which is an essential component of LCD screens in large flat-screen televisions, as well as monitors, computers, mobile phones, and more.
- Man-made leather for sporting goods and luxury products.
- Cement reinforcement agents.

Kuraray's Dental Division Introduced the Technology That Started It All

In 1978, Kuraray's Dental Division (hereafter Kuraray) gave life to adhesive dentistry with the introduction of CLEARFIL™ BOND SYSTEM F, the first commercial dentin bonding system utilizing simultaneous etching of enamel and dentin (current total-etch). Kuraray concurrently pioneered the first total-etch and first self-etch technique on dentin and enamel-reinventing cosmetic, operative and preventive dentistry as it is practiced today.

1978

CLEARFIL™ BOND SYSTEM F
First "total-etch" bonding system with phosphate monomer (Phenyl-P).



1978

CARIES DETECTOR
Aids in the excavation of the outer decalcified and infected carious dentin layer.

1983

PANAVIA™ EX
First adhesive resin cement with a phosphate monomer (MDP).



1985

CLEARFIL™ PHOTO A
First light-cure universal composite for anterior and posterior tooth restorations.



1986

CLEARFIL™ PHOTO CORE
Light-cure core build-up composite resin with high polymerization depth.



1987

CLEARFIL™ PHOTO BOND
Dual-cure, total-etch bonding system.



1993

CLEARFIL™ LINER BOND II
World's first self-etch bonding system.



1993

PANAVIA™ 21
First anaerobic-curing adhesive resin cement with a self-etch primer.

2000

CLEARFIL™ SE BOND
Most reliable generation of self-etch bonding systems.



2003

PANAVIA™ F 2.0
First resin cement that releases fluoride and is cured using an LED light.



2004

CLEARFIL™ PROTECT BOND
First self-etch adhesive in the world that contains the antibacterial monomer "MDPB."



2005

CLEARFIL™ S³ BOND
Self-etch, all-in-one adhesive.

Kuraray is Leading the Current Evolution of Dentistry

Historically, the business of dentistry was driven by fixing broken or painful teeth. Patients visited the dentist as a means to an end. But with Kuraray's introduction of CLEARFIL™ BOND SYSTEM F, adhesive dentistry began to provide patients with the means to a new beginning.

Today, the business of dentistry focuses on sound oral health and patient empowerment. Patients believe that having a great smile helps them look and feel better. No longer satisfied with oral pain relief and traditional amalgam fillings, today's patient wants it all: a natural looking smile with beautiful and strong teeth.

Kuraray's dental product portfolio spans over 35 years, offering bonding agents, cements, core build-ups and composites to help dentists turn patient desire into reality.



Kuraray is committed to continuing its heritage of technologies for humanity. Through constant innovation, research and development, Kuraray is changing cutting-edge technology into real world solutions.

2006

**CLEARFIL™
DC BOND**

Dual-cure bonding agent that uses MDP Monomer technology.



2010

**CLEARFIL™
SE Protect**

Antibacterial, cavity-cleansing and fluoride-releasing self-etch adhesive.



2012

**CLEARFIL™
DC CORE PLUS**

Dual-cure, Auto-mix core material.



2013

**CLEARFIL
MAJESTY™ ES-2**

The only Composite with VITA approved shades.



2013

**TEETHMATE™
DESENSITIZER**

Powder/Liquid Hydroxyapatite Desensitizer (HAp).



2013

**CLEARFIL™
DC Activator**

Makes bonding agent dual-cure for indirect applications.



2015

**PANA VIA™
SA Cement Plus**

Self-adhesive, self-etch cement.



2007

**CLEARFIL MAJESTY™
COMPOSITES**

A full line of composite resins with light diffusion similar to natural teeth. Includes Esthetic, Flow, and Posterior.



2011

**CLEARFIL™
ESTHETIC
CEMENT EX**

Dual-cure resin cement system.



2012

**PANA VIA™
SA Cement**

Self-adhesive, self-etch resin cement.



2012

**CLEARFIL™
S³ BOND PLUS**

Single-step, fluoride-release, self-etch adhesive.



2013

**CLEARFIL™
SE BOND 2**

Self-etch; light-cure bonding agent with improved curing properties and durability.



2013

**CLEARFIL
MAJESTY™ ES Flow**

A flowable restorative suitable for all cavity classifications.



2014

**CLEARFIL™
Universal Bond**

Total, self-or selective-etch bonding agent for both direct/indirect restorations.

KURARAY'S INTEGRATED SYSTEM

An Integrated Family

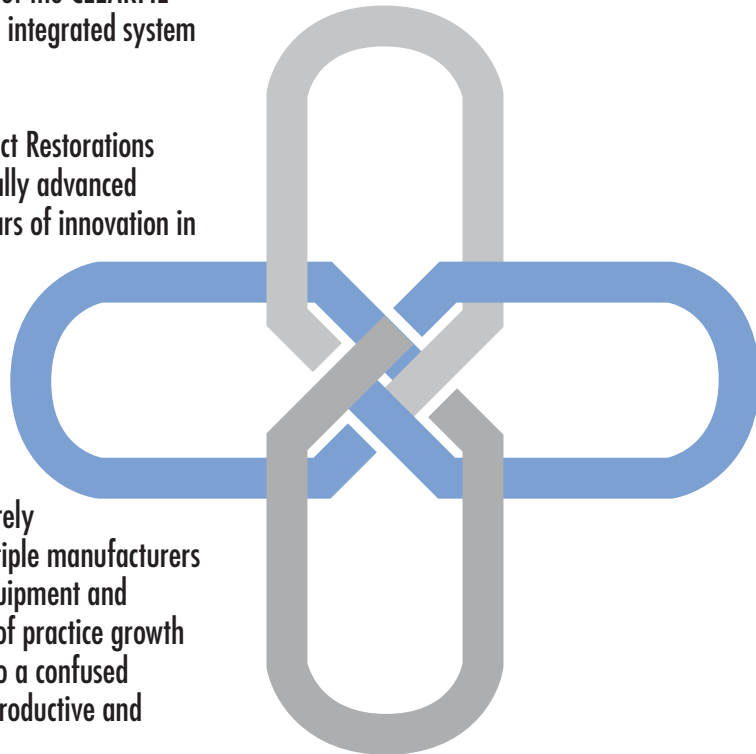
Each of the individual products in the CLEARFIL™, PANAVIA™, and TEETHMATE™ DESENSITIZER portfolios has been designed for best-in-class performance. In addition, all of the CLEARFIL™ products have been formulated to work as an integrated system for maximum efficacy and efficiency.

The only name you need to remember in Direct Restorations is Kuraray's CLEARFIL™ brand of technologically advanced products. You know you can trust over 30 years of innovation in adhesive dentistry with Kuraray CLEARFIL™.

Not All Technologies Are Equal

From bonding agents to composites, dentists rely on a wide range of dental products from multiple manufacturers to operate their day-to-day business. New equipment and products are added gradually as a reflection of practice growth and developing technology. This often leads to a confused mix of incompatible systems, resulting in unproductive and costly rebuilds.

Wouldn't it be beneficial to rely on one integrated system of products, specially designed to interact efficiently and seamlessly, every time?



CLEARFIL™ Bonds



CLEARFIL™ & PANAVIA™ Resin Cements

The Power of One

Kuraray develops and produces a broad range of high-quality, innovative dental products designed to achieve flawless results when used alone or as part of a unique, integrated system. Kuraray products continually receive top ratings from leading third party evaluators. By eliminating the need for trial and error methodologies, Kuraray's integrated system gives dental professionals confidence in knowing that their products will perform on every patient, every time.

In addition to the technical advantages gained from Kuraray's integrated system of products, dental professionals will experience the benefits of our comprehensive procedure guides and knowledgeable support staff. Practitioners also gain access to professional, streamlined customer service; one line of products means only one phone call to resolve product inquiries.

Maximum Performance Synergy

Each Kuraray product offers individual, state-of-the-art benefits and, when used in combination, delivers a seamless outcome. No matter which application is used, our bonding agents, cements, core build-ups and composites have been engineered for maximum performance synergy. Dental professionals who use Kuraray technology enjoy the benefits of:

- A system that evolves with the dental industry
- Improved efficiency in inventory control
- Minimal errors and rebuilds
- Reduced costs

Kuraray is committed to ongoing research and development with a focus on product evolution and customer service. As the industry leader in creating technologies for humanity, Kuraray is the integration of dentistry and cutting-edge technology.



CLEARFIL™ Restorative Composites



CLEARFIL™ Core Build-ups

KURARAY'S PATENTED MONOMERS

MDP Monomer



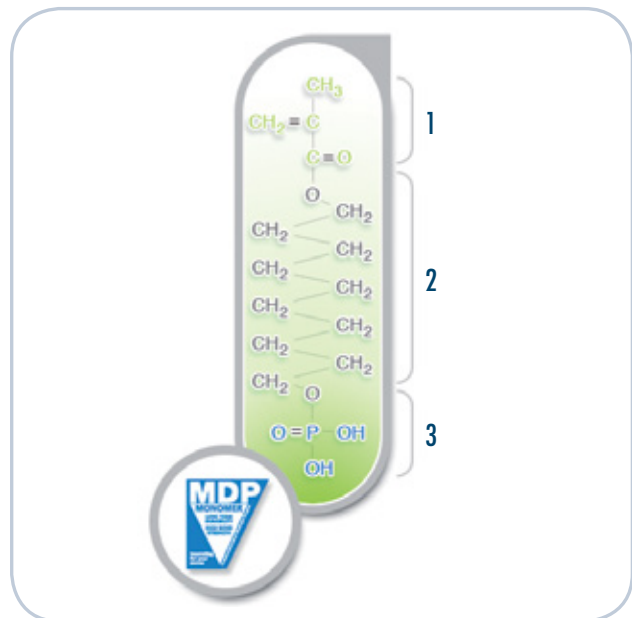
Description

After Kuraray introduced the first adhesive monomer in dental history by inventing the phosphate monomer Phenyl-P in 1976, its molecular structure was improved in 1983 by creating a molecule with greater adhesive capability to the tooth structure and an affinity for metal. The result of this development work was the MDP monomer (10-Methacryloyloxydecyl dihydrogen phosphate), which impressed dentists with its special monomer structure.

This phosphate monomer was extremely effective for enamel, dentin, and metal oxide (Zirconia and Alumina). Consequently, PANAVIA™, with the MDP monomer, was introduced as a high-performance adhesive resin cement for cementation to tooth structure and to metals.

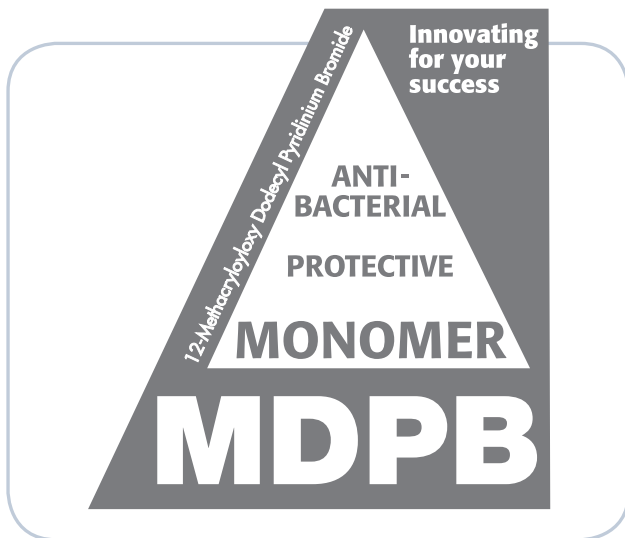
The impressive success of PANAVIA™ encouraged Kuraray to integrate the MDP monomer into other bonding systems, as well as to obtain a high degree of adhesion to tooth substrate from the formation of a chemical bond.

The MDP Monomer has high bond strength to tooth structure, Zirconia, Alumina, and other base metal surfaces due to the characteristic structure as shown in the illustration.



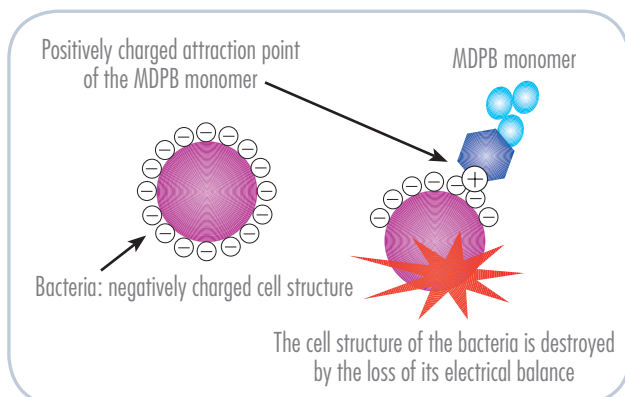
- 1 Terminal double bond group for polymerization
- 2 Hydrophobic alkylene group to maintain a delicate balance between hydrophobic and hydrophilic properties
- 3 Hydrophilic phosphate group for performance of the acid demineralization and chemical bonding to tooth structure

MDPB Monomer



Antibacterial Effects of the MDPB Monomer

The primer in CLEARFIL™ SE PROTECT eliminates bacteria by direct contact, thanks to the integrated functional MDPB monomer. As is the case with so many modern developments, the question, “How can that work?” can be answered relatively easily: The pyridinium group, as a component of the MDPB monomer (12-Methacryloyloxydodecyl pyridinium bromide), is positively charged. The cell structures of bacteria are generally negatively charged, which is why they are automatically attracted by the positively charged contact points of the MDPB monomer. They then lose their electrical balance, destroying the cell membrane of the bacteria. The bacteria are killed by this process, which is also known as bacteriolysis.



Safety of MDPB

The MDPB monomer is immobilized and broken down into its active components by the polymerization of the bonding layer. There it remains latently active without affecting the patient's own cells. The strength of the adhesive is not negatively affected by this process, patented by Kuraray, as is the case when chlorhexidine or other such cavity hygiene products are used. Moreover, it ensures that cytotoxic effects on the patient's own body cells, such as odontoblasts, are excluded long-term. These test results have been confirmed by the biological safety test ISO 10993-1.



MDPB monomer: successful biological test in accordance with ISO 10993-1

Long-Term Protection from Secondary Caries

Immediately after the polymerization of the composite (such as CLEARFIL™ MAJESTY), CLEARFIL™ SE PROTECT has already achieved an optimal sealing of the margin, thanks to its high degree of initial adhesion. The antibacterial cleansing effect occurs during the priming stage. This process, in conjunction with durable adhesion, possibly contributes to long-term protection.

The Proven Market Leader in Bonding Technology

The Kuraray line of CLEARFIL™ adhesive products is second to none in the industry. Many companies rely on slick marketing campaigns and manufactured hype to generate brand recognition, but as the #1 innovator in self-etch adhesives, proof of Kuraray's product superiority is in the numbers.

CLEARFIL™ SE BOND, the first and last name dentists need to know in adhesive bonds, continually receives top ratings by industry experts. Ranked the second most important product among the top 100 essentials for dental practitioners, the leading third party evaluator estimates that CLEARFIL™ SE BOND is preferred by 65% of the dental industry. In a market crowded with inferior products, dental professionals can confidently rely on the industry leader in bonds and adhesives.

The Bonds that Changed Dentistry

In 1978, Kuraray introduced the world's first dentin bonding agent, CLEARFIL™ BOND SYSTEM F, while concurrently developing the total-etch technique. Today, many dentists choose CLEARFIL™ bonds because of their strength, ease of use and dependability, secure in the knowledge that Kuraray's technology is built upon a tradition of scientific research and development that spans over a quarter century.



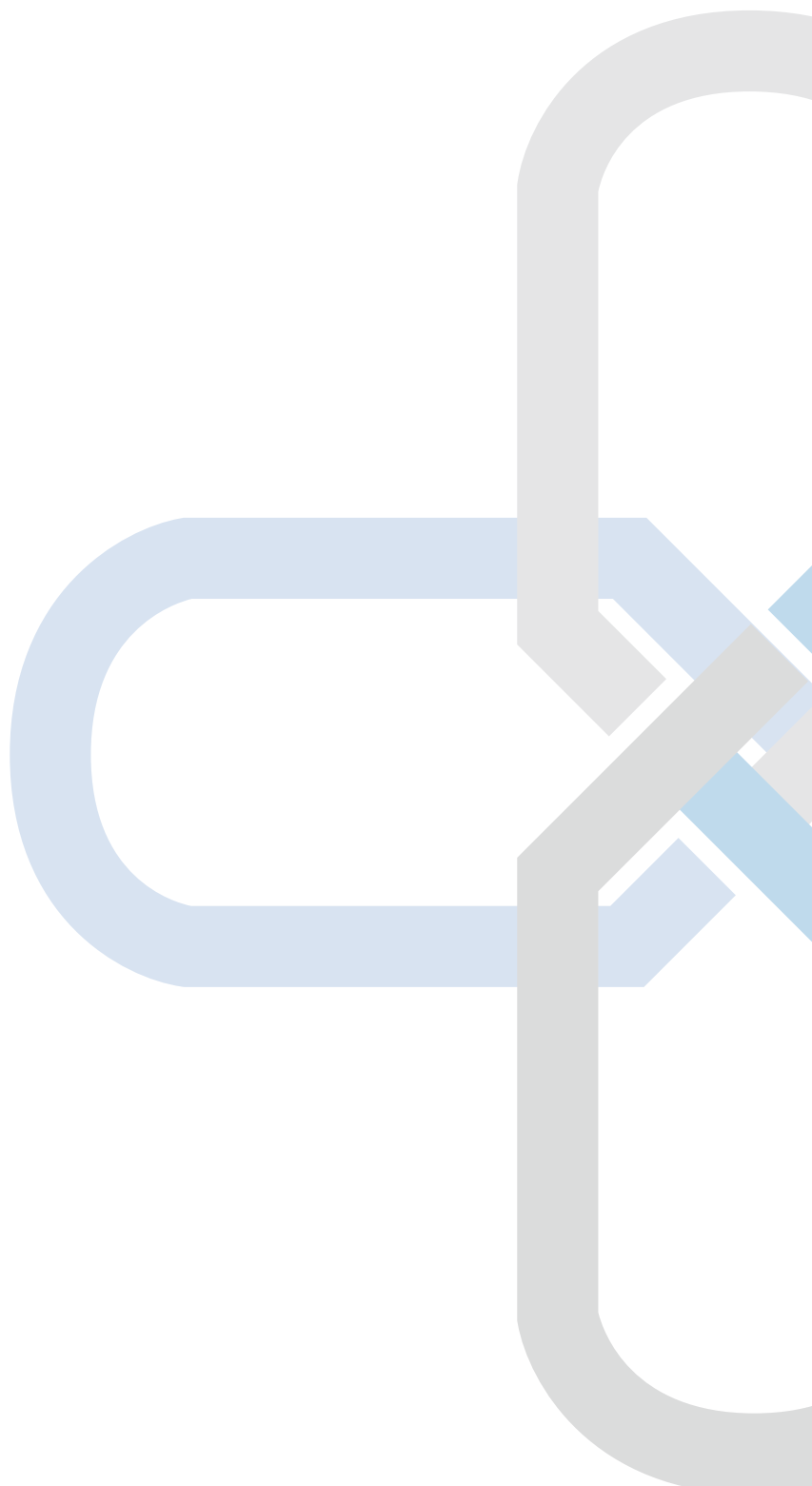
CLEARFIL™ BONDS

A Bond for All Reasons

The popularity of CLEARFIL™'s Universal Bond, SE BOND 2, SE BOND, DC BOND, S3 BOND PLUS, SE Protect, PHOTO BOND, NEW BOND, LINER BOND 2V, and other bond products for any type of restoration is due to their strength, durability, ease of use and reported patient satisfaction. Kuraray technology has radically reduced post-operative sensitivity and improved delivery methods, making CLEARFIL™ bonds easier than ever to apply. Every bonding agent has been specially formulated to solve specific procedural and case needs, and Kuraray's proprietary MDP monomer is the technological breakthrough behind this award winning line of products.

Continually named "Best in Category" by leading evaluators, Kuraray's dental adhesives are specially formulated to work on their own or in conjunction with Kuraray composites, cements and core build-up materials to achieve long-lasting results. Advantages of using Kuraray Dental's CLEARFIL™ bonds include:

- Reduced procedural time
- High bond strength to tooth enamel and dentin
- Superior sealing and protection
- Patient satisfaction due to reduced post-operative sensitivity
- An easy-to-use product from an integrated system



ADHESIVES

Overview

		Page number	Classification	Curing Type
Universal				
CLEARFIL™ Universal Bond		16	1-step system	Light
Self-etch				
CLEARFIL™ SE BOND 2		18	2-step system	Light
CLEARFIL™ SE BOND		20	2-step system	Light
CLEARFIL™ SE Protect		22	2-step system	Light
CLEARFIL™ S3 BOND PLUS		24	1-step system	Light
CLEARFIL™ DC BOND		26	1-step system	Dual
CLEARFIL™ LINER BOND 2V		28	2-step system	Light / Dual*
Total-etch				
CLEARFIL™ PHOTO BOND		29	2-step system (including etching)	Dual
CLEARFIL™ NEW BOND		30	2-step system (including etching)	Self

* Dual-cure is achieved when Bond A is mixed with Bond B.

Curing time (light-cure)	Direct Restoration	Indirect Restoration	Combination with self-cure composite	Desensitization	Film thickness
10 sec.	✓			✓	5-10 microns
10 sec.	✓			✓	50 microns
10 sec.	✓			✓	50 microns
10 sec.	✓			✓	50 microns
10 sec.	✓			✓	5-10 microns
10 sec. (optional)	✓	✓	✓	✓	5-10 microns
10 sec. (optional)	✓	✓	✓	✓	50 microns
10 sec.	✓	✓	✓		1 micron
N/A	✓	✓	✓		1 micron

The Adhesive Technology – Cornerstone of Modern, Minimally Invasive Dentistry

In 1978, Professor T. Fusayama from the Tokyo Medical and Dental University was confronted with a technical problem. He had the idea of permanently filling cavities with resin materials as an esthetic alternative to amalgam. But in contrast to hydrophilic tooth hard structure, the composites displayed hydrophobic properties and were not capable of establishing a close bond. To get around this problem, he developed a new technique for the conditioning of the dentin which would provide a surface suitable for the use of an adhesive. Going against the philosophy of the times, he etched both enamel and dentin with phosphoric acid (H_3PO_4). This preparation of the dentin removed the smear layer which appeared after the preparation, opened the dentinal tubules, and created the conditions for use of the following primer-adhesive system.

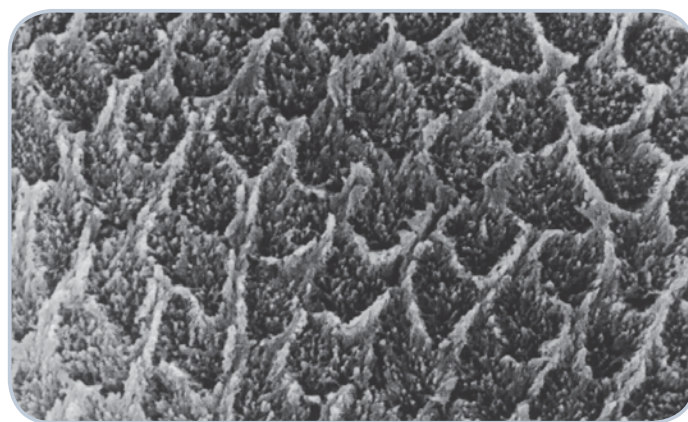
In cooperation with Kuraray, Inc. – at that time an industrial manufacturer of innovative special resin materials – the first total-etch bond, including an adhesive phosphate monomer for enamel and dentin, CLEARFIL™ BOND SYSTEM F, was developed.

While this system rapidly gained acceptance in Japan, dentin phosphoric acid etching was the subject of controversial discussions at the international level for a long time. It was not until the middle of the 1980s that it gained worldwide acceptance and has since been one of the standard procedures for multi-step adhesives.

The advantages of this technique are self-evident and have been confirmed over the course of time by numerous scientific studies. Besides the removal of the smear layer, there is a demineralization of the intertubular and peritubular dentin. Hydroxyapatite crystals from the collagen network are released and individual fibers are exposed. They are then coated by the hydrophilic monomers of the adhesive and permanently anchor themselves in the exposed network during polymerization.

Increased technique sensitivity of the total-etch system led to development of the self-etch technique. Although these systems produce good results when used correctly, total-etch multi-step adhesives were regarded as highly technique-sensitive in Japan, due to the precision required for the work steps and times: excessive etching removed more minerals from the dentin than desired and exposed the collagen fibers to a depth which was greater than the following adhesive could penetrate. Excessive drying caused the exposed collagen fiber network to collapse and blocked the access of the adhesive to the dentin areas below. This led to lower adhesive strength and simultaneously sensitivity and biting pain.

The selection of the volatile solvent in the bond systems also influenced the moisture of the dentin surface required for ideal results. Alcohol-based systems require an extremely dry surface, since alcohol is lighter than water; there is a high risk of overdrying. Acetone-based adhesives, on the other hand, work best on a slightly moist surface since acetone is drawn into the tubules through this condition. The definition of “slightly moist” is difficult to realize during actual work; the bond results are worsened if the surface is either too dry or too moist.



Enamel surface after acid etch treatment with phosphoric acid (37%)

Direct Desensitization and Conditioning With Water-Based Self-etch Adhesives of The CLEARFIL™ Series

CLEARFIL™ LINER BOND II was introduced by Kuraray at the beginning of the 1990s as the first self-etch adhesive in the world. The objective was to eliminate the technique sensitivities caused by the total-etch technique and to develop a system which required fewer work steps, achieved permanently reproducible results, and at the same time could prevent sensitivity and biting pain for the patient.

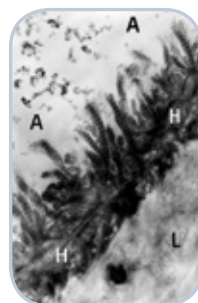
A water-based, self-etch primer was developed to avoid problems related to a separate etching technique or a defined surface moisture. This primer conditioned enamel and dentin in much the same way as phosphoric acid, but was not as aggressive and could be buffered in its effect by released calcium. The slightly acidic pH value was thus reduced further and dropped to a neutral level, which allowed the primer to stay in the cavity. This made it possible to avoid complicated work steps such as rinsing, drying, changing cotton rolls, as well as the risks of excessive etching and overdrying. The following adhesive without any volatile solvents could now penetrate all of the dentin layers, closing the dentinal tubules and contributing, after the polymerization, to prevention of post-operative sensitivity.

The development of the MDP adhesive monomer has improved further the chemical bond properties of the self-etch Kuraray adhesive. The TEM images show that the collagen fibers in the thin hybrid layers have not completely lost the hydroxyapatite, in contrast to the total-etch technique. The remaining hydroxyapatite can directly bond chemically with phosphate groups of Kuraray's own MDP monomer. (TEM Image 1 at right)

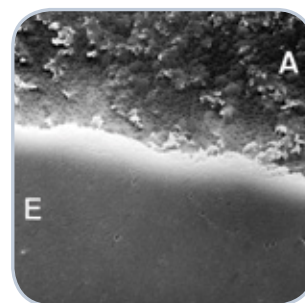
A similar effect can also be observed in the enamel. Although the enamel structure is only slightly affected, no fissure formation is determined between the adhesive, composite, and enamel. Although the adhesive strength without prior enamel etching was questioned when this technique was first introduced, various studies worldwide have since proven the efficacy of the MDP-based self-etch systems [average 35 MPa μ TBS micro-tensile bond strength (TEM Image 2 below) Inoue, Van Meerbeek]

Data from a clinical study of n=94 restorations placed with CLEARFIL™ SE BOND of Class V show an adhesive bond which is 100% intact after 36 months (Catholic University of Leuven, Belgium).

Due to the company's lead in research in the field of adhesive and resin technology, Kuraray Dental products achieve outstanding rankings in clinical in-vivo and in-vitro examinations. "REALITY," an independent American test institute, certified that CLEARFIL™ SE BOND caused absolutely no post-operative complaints (Issue 118, February 2000), while another institute praised the all-in-one adhesives CLEARFIL™ Universal Bond and CLEARFIL™ S3 BOND Plus as the best in their class from a total of four all-in-one systems which were tested.



1. TEM cross-section image: Dentin CLEARFIL™ SE BOND (Inoue, Van Meerbeek)



2. TEM cross-section image: Enamel CLEARFIL™ SE BOND (Inoue, Van Meerbeek)

CLEARFIL™ Universal Bond



CLEARFIL™ Universal Bond

Facts

- Universal Use: Can be used for Total-etch, Self-etch and Selective-etch techniques
- Original MDP formulation for unsurpassed adhesion
- No additional primer or activator is needed when used with CLEARFIL™ DC CORE PLUS/PANAVIA SA Cement Plus
- Bonds to zirconia, metals and silica-based ceramics including lithium disilicate
- Works on both wet and dry dentin when using the total-etch technique
- Shortest application time in both the total-etch and self-etch modes
- Can adhere to any material w/o additional primers; no need for separate silane coupling agent
- K-ETCHANT Syringe can be used during Selective-etch ; 35% thixotropic blue phosphoric acid gel with a pin-point needle tip
- Can be mixed with CLEARFIL™ DC Activator to become a dual-cure adhesive which can be used with any self/dual-cured resin cement or core material

Indications

- Direct restorations using light-cured composite resin
- Cavity sealing as a pretreatment for indirect restorations
- Treatment of exposed root surfaces
- Treatment of hypersensitive teeth
- Intraoral repairs of fractured restorations
- Post cementation and core build-ups
- Cementation of inlays, onlays, crowns, bridges and veneers

Description

CLEARFIL™ Universal Bond is a single-component, light-cure bonding agent indicated for all direct and indirect restorations in combination with all etching techniques (Total-Etch, Self-Etch or Selective-Etch). The adhesive is also indicated for the surface treatment of zirconia and silica-based glass ceramics (ex. lithium disilicate). When compared with other one-bottle universal adhesives, CLEARFIL™ Universal Bond exhibits higher bond strength. It also works on both wet and dry dentin using total-etch, unlike other bonds. CLEARFIL™ Universal Bond can be mixed with CLEARFIL™ DC Activator to become a dual-cure adhesive, thereby making this product truly “Universal” for all etching and restorative needs.

Product Codes

#3290KA CLEARFIL™ Universal Bond Kit: Bottle Standard Kit
1 Bond (5ml), 1 K-ETCHANT Syringe (3ml), 1 mixing dish, 1 light-blocking plate, applicator brushes (fine-50 pcs), needle tips (20 tips)

#3293KA CLEARFIL™ Universal Bond: Bottle Value Pack
3 Bond (5ml)

#3298KA CLEARFIL™ Universal Bond Unit Dose Std. Pack
(50 pcs)

#3299KA CLEARFIL™ Universal Bond Unit Dose Value Pack
(100 pcs)

Refills

#3292KA CLEARFIL™ Universal Bond: Bottle Refill
1 Bond (5ml)

Integrated System Recommendations



CLEARFIL MAJESTY™ ES-2 Series



CLEARFIL MAJESTY™ Posterior



CLEARFIL MAJESTY™ ES Flow



#3250KA CLEARFIL™ DC Activator
1 Activator (4ml)



#3252KA K-ETCHANT Syringe
2 K-ETCHANT Syringe (3ml), Needle tips
(40 tips)

CLEARFIL™ SE BOND 2



CLEARFIL™ SE BOND 2 Kit

Facts

- 2-step self-etch bond with improved catalyst system for improved bond strength
- New dual-cure activator for use with all indirect restorations and core build-up composites
- Same clinical procedure as the original CLEARFIL™ SE BOND
- Original MDP Adhesive Monomer
- No complicated steps; no-bottle shaking; no scrubbing; no multiple coats

Indications

- Direct restorations using light-cured composite resin
- Cavity sealing as a pretreatment for indirect restorations
- Treatment of exposed root surfaces
- Treatment of hypersensitive teeth
- Intraoral repairs of fractured restorations
- Post cementation using a dual-or self-cured composite resin
- Core build-ups using a light, dual-or self-cured core material
- Cementing inlays, onlays, crowns, bridges and veneers using a composite resin

Description

CLEARFIL™ SE BOND 2 is a two-step, self-etch, light-cure bonding agent with an improved catalyst system for stronger bonds and a new dual-cure activator for use with all indirect restorations and core build-up composites. With the same clinical procedure as the original CLEARFIL™ SE BOND, it is a simple upgrade to our new universal system. CLEARFIL™ SE BOND 2, when mixed with the new CLEARFIL™ DC Activator, provides a dual-cure chemistry that is ideal for any indirect restoration or composite core build-up material. The CLEARFIL™ SE BOND 2 PRIMER contains a high concentration of the original MDP Adhesion Monomer and is used to treat the surface of zirconia and metal restorations. It does not require light-curing, thus eliminating the concern of film thickness under indirect restorations. Mix 1 drop each of CLEARFIL™ SE BOND 2 PRIMER and CLEARFIL™ PORCELAIN BOND ACTIVATOR and use for pre-treating the internal surfaces of silica-based ceramics (ex. conventional porcelain; lithium disilicate).

Product Codes

- #3270KA CLEARFIL™ SE BOND 2 Kit
Primer (6ml), Bond (5ml), 1 mixing dish, 1 light-blocking plate, 1 outer case, 1 applicator brush (fine-50pcs).
- #3272KA CLEARFIL™ SE BOND 2 Value Pack
3 Primers (6ml), 3 Bonds (5ml)
- #3286KA CLEARFIL™ SE BOND 2 Unit Dose Std. Pack
(50 bond) (50 primer)

Refills

- #3281KA CLEARFIL™ SE BOND 2 BOND
1 Bond (5ml)
- #3282KA CLEARFIL™ SE BOND 2 PRIMER
1 Primer (6ml)

 **Integrated System Recommendations**



#3250KA
CLEARFIL™ DC Activator
1 Activator (4ml)



061KA
CLEARFIL™ PORCELAIN BOND ACTIVATOR
(4 ml) (Mixed with CLEARFIL™ SE BOND 2
Primer)

CLEARFIL™ SE BOND



CLEARFIL™ SE BOND Kit

Facts

- Improved marginal sealing from extremely high bond strength
- Water-based, mild self-etch primer
- Tried and proven 2-step self-etch bond system
- Simple, rapid, light-cure bond
- Minimal technique sensitivity
- Virtually no post-operative sensitivity
- Known as the “Gold Standard” of the self-etch adhesive systems

Indications

- Direct filling restorations using light-cure composite or compomer
- Cavity sealing as a pre-treatment for indirect restorations
- Treatment of hypersensitive and/or exposed root surfaces
- Intra-oral repairs of fractured facing crowns made of porcelain, hybrid ceramics or composite resin using light-cure composite
- Surface treatment of prosthetic appliances made of porcelain, hybrid ceramic, and cured composite resin

Description

CLEARFIL™ SE BOND is a light-cure bond system consisting of a self-etch primer and a bonding agent. The water-based primer enables the simultaneous treatment of enamel and dentin in one step. The patented MDP monomer helps to eliminate post-operative sensitivity. Direct skin contact with the contents of the bottles is avoided by the practical outer case. The necessity to open the individual bottles has been eliminated, avoiding the risks of skin allergies.

Product Codes

- #1970KA CLEARFIL™ SE BOND Kit
Primer (6 ml), Bond (5 ml), 2x50 Disposable brush tips, 2 Brush tip handles (white & black), 1 Mixing dish, 1 Light-blocking plate, 1 Outer case
- #1972KA CLEARFIL™ SE BOND Value Kit
3 Primers (6 ml), 3 Bonds (5 ml), 6x50 Disposable brush tips, 2 Brush tip handles (white & black), 1 Mixing dish, 1 Light-blocking plate, 1 Outer case

Refills

- #1981KA CLEARFIL™ SE BOND BOND (5 ml)
- #1982KA CLEARFIL™ SE BOND PRIMER (6 ml)
- #902KA Mixing dish
- #965KA Brush tip handle (white)
- #966KA Brush tip handle (black)
- #968KA Disposable brush tips, pack of 50 (white)

The outer case is used for the simple and precise application of the liquids.



Integrated System Recommendations

Pre-treatment of the ceramic surface

When a restoration made of ceramic, hybrid ceramic or composite resin is used, it should first be silanated to optimize the adhesion properties. To create a silane, place one drop each of CLEARFIL™ SE BOND Primer and CLEARFIL™ PORCELAIN BOND ACTIVATOR together into a well of the mixing dish and mix them. Apply to the adherent surface of the restoration for 5 seconds and dry with a mild air stream.



061KA
CLEARFIL™ PORCELAIN BOND ACTIVATOR
(4 ml) (Mixed with CLEARFIL™ SE BOND
Primer)



2550KA
CLEARFIL™ CERAMIC PRIMER (4 ml)
You can also use CLEARFIL™ CERAMIC PRIMER
without mixing (please see page 32)

Esthetic Results

We recommend CLEARFIL MAJESTY™ composites, especially for esthetic restorations.



CLEARFIL MAJESTY™ ES-2 Series



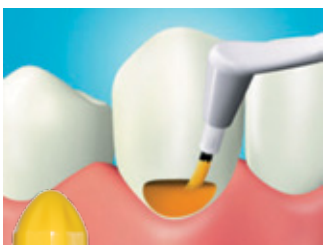
CLEARFIL MAJESTY™ Posterior



CLEARFIL MAJESTY™ ES Flow



Procedure Guide: CLEARFIL™ SE BOND



Primer

- Apply primer & leave for 20 seconds
- Do not rinse
- Dry with mild air flow



Bond

- Apply bond & distribute evenly with mild air flow
- Light-cure for 10 seconds



Restorative

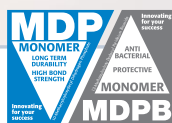
- Place composite or compomer restorative & light-cure



CLEARFIL™ SE Protect



CLEARFIL™ SE Protect Kit



Facts

- First and still the only self-etch adhesive in the world that contains an antibacterial monomer “MDPB”
- Tried and proven 2-step self-etch bond system
- Virtually no post-operative sensitivity
- Fast and simple to use, no rinsing
- High bond strength to enamel and dentin
- Fluoride-releasing properties
- Minimal dentin decalcification; maximum marginal leakage protection

Indications

- Direct restorations using light-cure composite resin or compomer
- Cavity sealing as a pre-treatment for indirect restorations
- Treatment of hypersensitive and/or exposed root surfaces
- Intra-oral repairs of fractured crowns/bridges made of porcelain, hybrid ceramics or composite resin using light-cure composite resin
- Surface treatment of prosthetic appliances made of porcelain, hybrid ceramics and cured composite resin
- Core build-ups using light- or dual-cure composite resin
- Cavity sealing under amalgam restorations

Description

CLEARFIL™ SE Protect contains the same proprietary self-etch, light-cure technology as CLEARFIL™ SE BOND, plus two additional proprietary technologies: Long-term Fluoride-release and the MDPB monomer, which has an antibacterial cavity cleansing effect. The antibacterial effect of the MDPB monomer has been statistically significant in single and comparison tests. Examinations by the Pulp Biology Group (University of Birmingham) show a clear reduction of cultivated bacteria from MDPB in cavity preparations in teeth with natural caries. No harmful effects on the vitality of the odontoblasts and fibroblasts were determined. Three more studies evaluated possible biological effects. There are indications that the tertiary dentin formation initiated by CLEARFIL™ SE Protect is comparable to that observed following dentin treatment with calcium hydroxide preparations.

Product Code

#2870KA CLEARFIL™ SE Protect Kit
Primer (6 ml), Bond (5 ml), 2 x 50 Disposable brush tips, 2 Brush tip handles (white & black), 1 Mixing dish, 1 Light-blocking plate, 1 Outer dispensing case

#2872KA CLEARFIL™ SE Protect Value Kit
3 Primers (6 ml), 3 Bonds (5 ml), 6 x 50 Disposable brush tips, 2 Brush tip handles (white & black), 1 Mixing dish, 1 Light-blocking plate, 1 Outer dispensing case

Refills

- #2881KA CLEARFIL™ SE Protect BOND: 5 ml
- #2882KA CLEARFIL™ SE Protect PRIMER: 6 ml
- #902KA 1 Mixing dish
- #965KA Brush tip handle (white)
- #966KA Brush tip handle (black)
- #968KA Disposable brush tips, pack of 50 (white)

Integrated System Recommendations

Esthetic results

We recommend CLEARFIL MAJESTY™ composites, especially for esthetic restorations.



CLEARFIL MAJESTY™ ES-2 Series



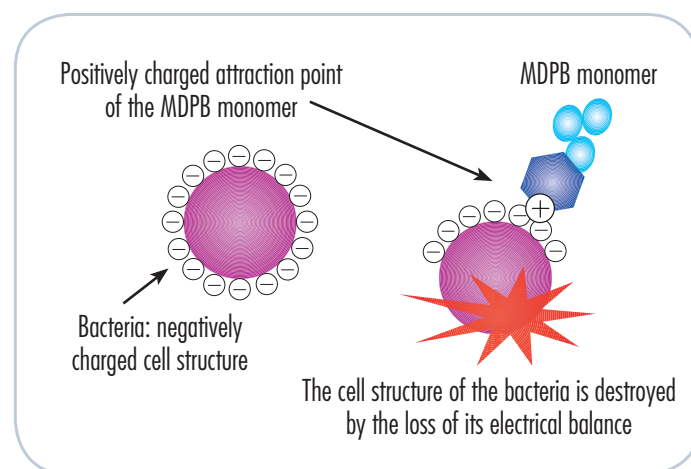
CLEARFIL MAJESTY™ Posterior



CLEARFIL MAJESTY™ ES Flow

The primer in CLEARFIL™ SE Protect eliminates bacteria by direct contact, thanks to the integrated MDPB monomer. It works because the pyridinium group, as a component of the MDPB monomer (12-Methacryloyloxydodecyl pyridinium bromide), is positively charged. The cell structures of bacteria are generally negatively charged, which is why they are automatically attracted by the positively charged contact points of the MDPB monomer. They then lose their electrical balance, destroying the cell membrane of the bacteria. The bacteria are killed by this process, which is also known as bacteriolysis.

Immediately after the polymerization of the composite (such as CLEARFIL MAJESTY™), CLEARFIL™ SE Protect has already achieved an optimal sealing at the margin because of its high degree of initial adhesion.



CLEARFIL™ S3 BOND PLUS (CLEARFIL™ TRI-S BOND PLUS)



CLEARFIL™ S3 BOND PLUS & CLEARFIL™ S3 BOND PLUS Unit Dose

Facts

- Speed. Strength. Simplicity.
- Self-etch, all-in-one adhesive with high bond strength
- No technique sensitivity: no mixing, no shaking, no multi-application
- Forms a thin yet strong, durable bond layer with nano-microfiller
- Water/ethanol-based composition
- Virtually no post-operative sensitivity
- Unique Molecular Dispersion Technology prevents phase separation

Indications

- Direct restorations using light-cure composite resin
- Cavity sealing as a pre-treatment for indirect restorations
- Treatment of exposed root surfaces
- Intra-oral repairs of fractured crowns/bridges made of porcelain or composite resin
- Surface treatment of prosthetic appliances made of porcelain or composite resin
- Core build-ups using light- or dual-cure composite resin
- Core build-ups and post cementation with CLEARFIL™ DC CORE PLUS.

Description

CLEARFIL™ S3 BOND PLUS is a light-cure, self-etch, all-in-one adhesive system which makes it possible to treat enamel and dentin simultaneously with only one liquid component and one application. It provides significantly reduced post-operative sensitivity and high bond strength. CLEARFIL™ S3 BOND PLUS reaches maximum adhesive values in a one-bottle, one-step application process, without any hidden steps. Total working time is approximately 25 seconds.

Dentists have been using it successfully all over the world. CLEARFIL™ S3 BOND PLUS has been rated by two independent test institutes as the best all-in-one adhesive.

CLEARFIL™ S3 BOND PLUS when utilized with our complementary component CLEARFIL™ DC CORE PLUS can achieve dual-cure core build-up/post cementation without an additional bottle.

Product Codes

- #2890KA CLEARFIL™ S3 BOND PLUS Kit
1 Bottle (4 ml), 50 Applicator brushes (fine), 1 Mixing dish, 1 Light-blocking plate
- #2893KA CLEARFIL™ S3 BOND PLUS Value Pack
3 Bottles (4 ml each)
- #2898KA CLEARFIL™ S3 BOND PLUS Unit Dose Std. Pack
0.1 ml (50) unit dose with (50) applicator brushes
- #2899KA CLEARFIL™ S3 BOND PLUS Unit Dose Value Pack
0.1 ml (100) unit dose with (100) applicator brushes

Refills

- #1022KA Dispensing Dish + Light Blocking Plate
- #1024KA Fine Applicator Brushes (50)

Integrated System Recommendations

Esthetic results

We recommend CLEARFIL MAJESTY™ composites, especially for esthetic restorations.



CLEARFIL MAJESTY™ ES-2 Series



CLEARFIL MAJESTY™ Posterior



CLEARFIL MAJESTY™ ES Flow

CLEARFIL™ S3 BOND PLUS Kit



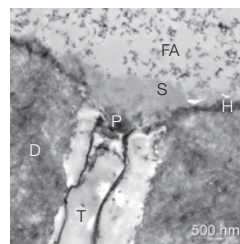
Procedure Guide:



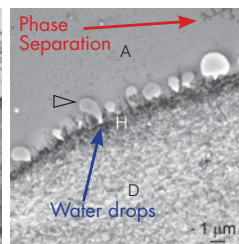
* Bond contains ethanol, which could lower the bond strength if it is not evaporated and dried completely.

Adhesive Interface in the Presence of Simulated Intrapulpal Pressure

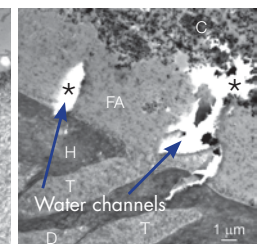
CLEARFIL S3 BOND PLUS



i BOND Self Etch*



Prime & Bond NT*

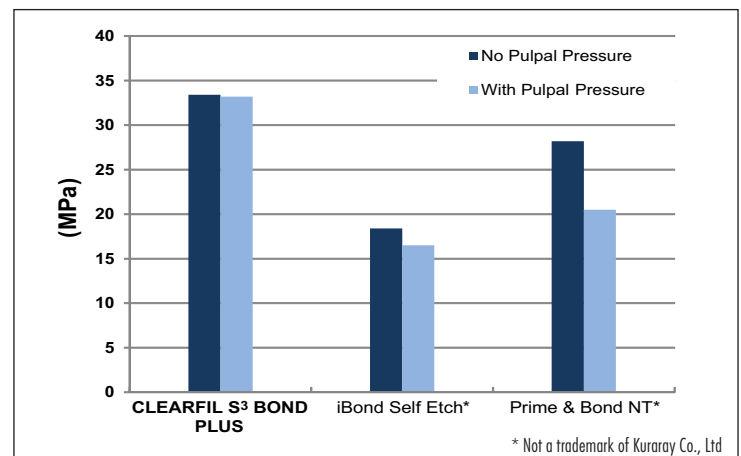


TEM image of the bond-dentin interface in the presence of simulated intrapulpal pressure.

FA: filled adhesive, A: Adhesive, P: hybridized smear plug, S: hybridized smear layer, H: hybridized intact dentin, T: dentinal tubule, D: laboratory demineralized dentin.

Bonding steps under simulated pulpal pressure are more accurate to simulate actual clinical cases, when compared without the pressure (normal bonding tests).

Micro-tensile Bond Strength to Dentin with/without Pulpal Pressure



All data courtesy of Dr. Pashley and Dr. Tay, Georgia Health Science University.

CLEARFIL™ DC BOND



CLEARFIL™ DC BOND Kit

Facts

- Strong enamel bond strength (equal to or stronger than total-etch bonding agents)
- Virtually no post-operative sensitivity
- Bonds to all light-, self- and dual-cure restorative composites, core build-up composites and resin cements for all direct and indirect restorations
- Easy one application procedure
- Low film thickness (5 - 10 microns)
- Dentin sealing adhesive for indirect restorations
- No bad taste from phosphoric acid

Indications

- Core build-ups using light-, dual-, or self-cure composite resin
- Direct restorations using light-cure composite resin
- Direct restorations using self-cure composite resin
- Cavity sealing as a pre-treatment for indirect restorations
- Treatment of exposed root surfaces
- Intra-oral repairs of fractured crowns/bridges made of porcelain, ceramics, hybrid ceramics, or composite resin

Description

CLEARFIL™ DC BOND is a versatile, self-etch, single-step, dual-cure dental adhesive that provides reduced post-operative sensitivity and durable bond strength for indirect and direct restorations. It is also easy and fast to use.

CLEARFIL™ DC BOND dramatically simplifies bonding procedures, while also providing a long-term, durable bond. The improved features are the result of the new and proprietary homogenous combining of a hydrophilic and hydrophobic technology and its improved self-cure activity. CLEARFIL™ DC BOND has minimal technique sensitivity, and is indicated extensively for light-cure, dual-cure, and self-cure composites or for desensitizing dentin and bonding dual-cure and self-cure composite cements (CLEARFIL™ ESTHETIC CEMENT EX) in cases of indirect restorations.

CLEARFIL™ DC BOND's improved self-cure activity between the oxygen-inhibited layer and dual-cure and self-cure resins assures reliable bonding for core-build ups and indirect restorations. Its thin film thickness is favorable for indirect restorations using composite resin cements.

Product Codes

#2510KA CLEARFIL™ DC BOND Kit
Bond Liquid A (4 ml), Bond Liquid B (4 ml), 1 Brush tip handle (white), 1 Mixing dish, 1 Light-blocking plate, 50 Disposable brush tips

Refills

#2512KA CLEARFIL™ DC BOND, Liquid A (4 ml)
#2513KA CLEARFIL™ DC BOND, Liquid B (4 ml)
#902KA Mixing dish
#965KA Brush tip handle (white)

 **Integrated System Recommendations**



*CLEARFIL™ ESTHETIC CEMENT EX Kit



#2942KA CLEARFIL DC CORE PLUS (Dentin)
#2943KA CLEARFIL DC CORE PLUS (White)



CLEARFIL MAJESTY™ ES-2 Series



CLEARFIL MAJESTY™ Posterior



CLEARFIL MAJESTY™ ES Flow



townie
choice
awards.2009

*For additional components and a complete listing of kits, see page 41.

Procedure Guide: CLEARFIL™ DC BOND

Procedure of direct restorations using light-cure composite



CLEARFIL™ LINER BOND 2V



CLEARFIL™ LINER BOND 2V Kit

Facts

- Tried and proven 2-step self-etch bond system
- Suitable for light-cure, self-cure and dual-cure composites
- High adhesive properties to enamel and dentin
- Water-based, mild self-etch
- Virtually no post-operative sensitivity

Indications

- Direct filling restorations using light-cure or self-cure composite
- Bonded amalgam restorations
- Treatment of hypersensitive and/or exposed root surfaces
- Cavity sealing as a pre-treatment for indirect restorations
- Intra-oral repairs of fractured porcelain facing crowns using light-cure composite
- Cementing inlays and onlays made of porcelain (or composite) using composite resin cement

Description

CLEARFIL™ LINER BOND 2V enables the processing of all light-cure and self-cure composites, as well as amalgams. It can therefore be described as a “universal bond.”

The bond system comprises a self-etch, two-component primer and a two-component bonding agent. The mild, self-etch BOND SYSTEM forms a high quality hybrid layer; yet it achieves optimal adhesion and, at the same time, prevents post-operative sensitivity.

In conventional total-etch bond systems, the etching procedure collapses the exposed collagen fiber network, resulting in decreased bond strength. By contrast, CLEARFIL™ LINER BOND 2V is bio-compatible with respect to the tooth tissue. Thanks to the mild etching and decalcification effect of the primer, as well as its natural water content, the collagen fiber network retains its natural form and volume. These properties of CLEARFIL™ LINER BOND 2V make successful adhesion of both the tooth structure and the restoration possible.

Product Code

#1921KA CLEARFIL™ LINER BOND 2V Kit
 Primer: Liquid A (6 ml), Liquid B (6 ml); Bond: Liquid A (5 ml), Liquid B (3 ml); 2x50 Disposable brush tips, 1 Brush tip handle (white), 1 Mixing dish, 1 Light-blocking plate, 1 Box sponge pledgets, 1 System tray

Refills

- #1943KA CLEARFIL™ LINER BOND 2V Primer Liquid A (6 ml)
- #1944KA CLEARFIL™ LINER BOND 2V Primer Liquid B (6 ml)
- #1930KA CLEARFIL™ LINER BOND 2V Bond Liquid A (5 ml)
- #1931KA CLEARFIL™ LINER BOND 2V Bond Liquid B (3 ml)
- #902KA Mixing dish
- #941KA Box sponge pledgets
- #965KA Brush tip handle (white)
- #968KA Disposable brush tips, pack of 50 (white)



CLEARFIL™ PHOTO BOND



CLEARFIL™ PHOTO BOND

Facts

- High bond strength to enamel and dentin
- Both light-cure and self-cure
- Simple and fast procedure

Indications

- Enamel and dentin bonding agent for direct composite restorations

Description

CLEARFIL™ PHOTO BOND is a dual-cure adhesive for enamel and dentin, based on the total-etch technique. CLEARFIL™ PHOTO BOND has been developed for use with light-cure and dual-cure restorative materials. In addition, direct adhesion to ceramic can be achieved by mixing with CLEARFIL™ PORCELAIN BOND ACTIVATOR.

Product Code

#070KA CLEARFIL™ PHOTO BOND Kit
Catalyst (6 ml), Universal (6 ml), K-etchant GEL (6 ml),
1 Mixing dish, 1 Small brush (bent), 1 Box sponge pledgets

Refills

- #075KA CLEARFIL™ PHOTO BOND Catalyst (6 ml), Universal (6 ml)
- #073KA CLEARFIL™ PHOTO BOND Catalyst (6 ml)
- #074KA CLEARFIL™ PHOTO BOND Universal (6 ml)
- #013KA K-etchant GEL (6 ml)
- #902KA Mixing dish
- #908KA Small brush (bent)
- #941KA Box sponge pledgets

Integrated System Recommendations



#013KA K-etchant GEL: 6 ml

K-etchant GEL is especially well-suited for the etching of teeth, cleaning of the adherent surface of restorations, or activation of the surface of silica-based ceramics. The thixotropic property provides simple processing of 40% phosphoric acid.



#066KA CLEARFIL™ SA PRIMER: 6 ml

CLEARFIL™ SA Primer is an adhesion primer containing a salicylic acid derivative monomer to promote the affinity to collagen fibers. CLEARFIL™ SA Primer enhances the bond strength of CLEARFIL™ PHOTO BOND.



#061KA CLEARFIL™ PORCELAIN BOND ACTIVATOR: 4 ml

CLEARFIL™ PORCELAIN BOND ACTIVATOR is a silane coupling agent which guarantees high bond strength with CLEARFIL™ PHOTO BOND and eliminates the need for Hydrofluoric Acid (HF).

CLEARFIL™ NEW BOND



CLEARFIL™ NEW BOND Catalyst
CLEARFIL™ NEW BOND Universal

Facts

- High bond strength to enamel and dentin
- Self-cure
- Simple and fast procedure

Indications

- Enamel and dentin bonding agent for direct composite restorations

Description

CLEARFIL™ NEW BOND is a self-cure adhesive for enamel and dentin, based on the total-etch technique. CLEARFIL™ NEW BOND has been developed for use with self-cure restorative composite materials. In addition, direct adhesion to ceramic can be achieved by mixing with CLEARFIL™ PORCELAIN BOND ACTIVATOR.

Product Codes

Refills

- #053KA CLEARFIL™ NEW BOND Catalyst: 6 ml
- #054KA CLEARFIL™ NEW BOND Universal: 6 ml

Integrated System Recommendations



#013KA K-etchant GEL: 6 ml

K-etchant GEL is especially well-suited for the etching of teeth, cleaning of the adherent surface of restorations, or activation of the surface of silica-based ceramics. The thixotropic property provides simple processing of this 40% phosphoric acid.



#061KA CLEARFIL™ PORCELAIN BOND ACTIVATOR: 4 ml

CLEARFIL™ PORCELAIN BOND ACTIVATOR is a silane coupling agent which guarantees high bond strength with CLEARFIL™ NEW BOND and eliminates the need for Hydrofluoric Acid (HF).

CLEARFIL™ DC Activator



CLEARFIL™ DC Activator

Facts

- Converts your CLEARFIL™ Adhesive into a truly Universal Dual-Cure Bonding System
- Low film thickness for indirect restorations
- Strong self-cure bond strengths
- Touch-Cure affect which reverses the shrinkage and cures the material at the tooth interface first

Indications

- Use the bond portion from CLEARFIL™ SE BOND 2 or CLEARFIL™ SE Protect, or the bottle system of CLEARFIL™ Universal Bond to create a truly universal adhesive for all your indirect and core build-up restorations

Description

CLEARFIL™ DC Activator is a dual-cure catalyst that contains alcohol, initiators and unique, advanced catalysts. The product provides good bond strengths in the self-cure mode when compared to other adhesives on the market. This advanced chemistry eliminates the light-curing inside of indirect restorations as required by many "Universal" adhesives presently available. The addition of alcohol reduces the film thickness of the CLEARFIL™ bonding agents to approximately 3-5 microns in the self-cure mode. This creates an ideal adhesive

layer for indirect restorations. A Touch-Cure affect is evident after the combination of CLEARFIL™ DC Activator with a CLEARFIL™ bonding agent. Activation of the resin cement or core build-up material occurs when it "Touches" the CLEARFIL™ bonding system. This unique property, "Touch-Cure" affect reverses the shrinkage and cures the material at the tooth interface first, thereby providing an exceptional seal and long-term bond.

Product Code

#3250KA CLEARFIL™ DC Activator
1 Activator (4ml)

Integrated System Recommendations



#2870KA CLEARFIL™ SE Protect kit



#3270KA CLEARFIL™ SE BOND 2 kit



#3290KA CLEARFIL™ Universal Bond Kit:
Bottle Standard Kit

CLEARFIL™ CERAMIC PRIMER



CLEARFIL™ CERAMIC PRIMER

Facts

- Does not require toxic Hydrofluoric Acid (HF)
- Use with any porcelain, composite, hybrid ceramics, and metal oxide ceramics (Alumina and Zirconia)
- Fast and easy application with one component (No mixing needed)
- Contains the dependable adhesive monomer MDP, the same monomer used in PANAVIA™ and CLEARFIL™ SE BOND
- Bonds directly to resin cement (No bonding agent needed)
- Bonds directly to restorative composites for intra-oral repairs
- Long, stable shelf-life (2 years from manufacturing)

Indications

- Surface treatment of porcelain, ceramics, hybrid ceramics or composite resin
- Intra-oral repairs of fractured crowns/bridges made of porcelain, ceramics, hybrid ceramics or composite resin

*For additional components and a complete listing of kits, see page 41.

Description

CLEARFIL™ CERAMIC PRIMER secures a unique bond with all materials for esthetic restorations. In addition to the tried and proven adhesive monomer MDP for bonding to metal oxide, it contains the silane coupling agent MPS (γ Methacryloyloxypropyl trimethoxysilane), which guarantees strong adhesion to all materials for esthetic restorations. CLEARFIL™ CERAMIC PRIMER maintains excellent adhesion property in long-term storage by the optimum combination of the ingredients.

Product Code

#2550KA CLEARFIL™ CERAMIC PRIMER: 4 ml

Integrated System Recommendations



*CLEARFIL™ ESTHETIC CEMENT EX Kit



#1973KA CLEARFIL™ REPAIR Multi Purpose



CLEARFIL™ PORCELAIN BOND ACTIVATOR



CLEARFIL™ PORCELAIN BOND ACTIVATOR*

Facts

- Pre-treatment for restorations made of porcelain or composite resin
- Contains the silane coupling agent MPS for strong, permanent adhesion to all materials for esthetic restorations
- Fresh mixing with CLEARFIL™ Bonds guarantees high bond strength
- Suitable for intra-oral and extra-oral use

Indications

- Repair of porcelain or porcelain fused-to-metal crowns and bridges
- Restoration of gingival porcelain areas where bonding to porcelain is necessary
- Increased retention of porcelain inlays, onlays, crowns and veneers
- Increased retention of composite inlays and onlays

Description

CLEARFIL™ PORCELAIN BOND ACTIVATOR is a silane coupling agent, when used in combination with CLEARFIL™ S³ BOND PLUS (bottle), CLEARFIL™ PHOTO BOND or CLEARFIL™ NEW BOND, the primers only of the following bond systems: CLEARFIL™ SE BOND 2, CLEARFIL™ SE BOND, CLEARFIL™ SE Protect, or CLEARFIL™ LINER BOND 2V, assures high bond strength. The fresh mixture can be applied directly onto the surface of restorations made of porcelain, hybrid ceramic or composite resin to create the bond. The adhesion system is convenient, uncomplicated, and time-saving.

Product Code

#061KA CLEARFIL™ PORCELAIN BOND ACTIVATOR: 4 ml

Integrated System Recommendations



#2890KA CLEARFIL™ S³ BOND PLUS Set



#1982KA CLEARFIL™ SE BOND PRIMER: 6 ml
#3282KA CLEARFIL™ SE BOND 2 PRIMER: 6 ml

Procedure Guides



Activate silane by mixing CLEARFIL™ SE BOND PRIMER and CLEARFIL™ PORCELAIN BOND ACTIVATOR in a ratio of 1:1 in a mixing well.



Apply silane to the restoration and allow to react for 5 sec. Then apply mild airflow.

* This product needs to be mixed with a CLEARFIL™ Bonding Agent before using.



PRE-TREATMENT AGENT

Adhesive Metal Primer

ALLOY PRIMER



ALLOY PRIMER

Facts

- Easy intra- and extra-oral use
- Increases bond strength to all metal surfaces
- Replaces the procedure of tin-plating

Indications

- Adhesion support of metal inlays, onlays, crowns and bridges
- Adhesion of metal cast posts
- Repair of fractured resin-based facing crowns and porcelain-fused metal crowns and bridges
- Repair of dentures

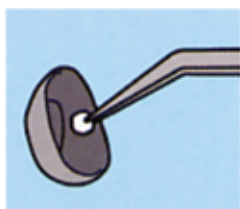
Procedure Guide:

Metal inlays, onlays, crowns and bridges / Adhesion bridges and metal splints / Metal posts

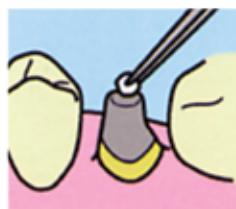
Cementing a crown to precious metal core using PANAVIA™



Sandblast the inner surface of the crown



Apply ALLOY PRIMER to the inner surface of the crown



Apply ALLOY PRIMER to the metal core



Apply PANAVIA™ ED PRIMER to the metal abutment and tooth structure



Cement using PANAVIA™ paste

Description

ALLOY PRIMER is a pre-treatment agent for conditioning metal and is used to secure the adhesive capability of resins to gold, titanium, and other dental alloys. Tin-plating is not required since the ALLOY PRIMER creates excellent bond strength to the metal surface.

Product Code

#064KA ALLOY PRIMER: 5 ml

Integrated System Recommendations



#2550KA CLEARFIL™ CERAMIC PRIMER: 4 ml



#1973KA CLEARFIL™ REPAIR Multi Purpose



KURARAY RESIN CEMENTS

One Size Does Not Fit All

In a market crowded with wide ranging cementation materials of varied effectiveness, finding the right cement for each procedure has become a challenge for many dentists. Often practices operate utilizing multiple cements to fulfill all of their restoration needs. In fact, a recent study indicates that over half of practicing dentists feel overwhelmed by the number of available products, agreeing with the statement, "There are too many resin cements available; it's hard to choose the right one".

What if one product line could eliminate the guesswork and provide consistent, long-lasting results? Kuraray's full performance line of resin cements is specially engineered to meet every restoration need with one of four easy-to-use formulas: CLEARFIL™ ESTHETIC CEMENT EX, PANAVIA™ F 2.0, PANAVIA™ 21 and PANAVIA™ SA Cement Plus.

The Future of Cementation is Kuraray

Kuraray's extensive research with hundreds of dentists has told us exactly what dental professionals want: adhesive strength, minimal post-operative sensitivity, accurate color matching and easy handling. Our continued innovation has resulted in not one,

but four superior products, and each one delivers those qualities deemed most important by dental professionals.

CLEARFIL™ ESTHETIC CEMENT EX, PANAVIA™ F 2.0, PANAVIA™ 21 and PANAVIA™ SA Cement Plus are indicated for almost any restoration, and all four proprietary formulas provide adhesion to dentin, metal oxide and silica-based ceramics, as well as precious and non-precious metals. Simple delivery methods and a unique shade matching system ensure that every application is durable, accurate and nearly effortless, with minimal sensitivity.

The Technology that Dentists Need, the Look that Patients Want

All four Kuraray Dental cements are formulated to work within our integrated system of bonds, composites and core build-ups. Dentists who use Kuraray resin cements also enjoy:

- Superior strength and longevity
- Easy-to-match shades and color stability
- Advanced delivery methods and ease of use
- Little or no post-operative sensitivity

Clinicians know that they have made the right choice for cosmetic and adhesive performance with CLEARFIL™ ESTHETIC CEMENT EX, PANAVIA™ F 2.0, PANAVIA™ 21 and PANAVIA™ SA Cement Plus.



CLEARFIL™ & PANAVIA™ Resin Cements

RESIN CEMENTS

Overview

	Indications			
	Crowns & bridges	Inlays/onlays	Veneers	Maryland bridges
<p>PANA VIA™ SA Cement Plus</p>  <p>MDP MONOMER LONG TERM DURABILITY HIGH BOND STRENGTH Innovating for your success</p>	✓	✓		✓
<p>CLEARFIL™ ESTHETIC CEMENT EX</p>  <p>MDP MONOMER LONG TERM DURABILITY HIGH BOND STRENGTH Innovating for your success</p>	✓	✓	✓ (best for esthetics)	✓
<p>PANA VIA™ F 2.0</p>  <p>MDP MONOMER LONG TERM DURABILITY HIGH BOND STRENGTH Innovating for your success</p>	✓	✓	✓	✓
<p>PANA VIA™ 21</p>  <p>MDP MONOMER LONG TERM DURABILITY HIGH BOND STRENGTH Innovating for your success</p>	✓	✓		✓

1) Must be used with CLEARFIL™ CERAMIC PRIMER or CLEARFIL™ PORCELAIN BOND ACTIVATOR

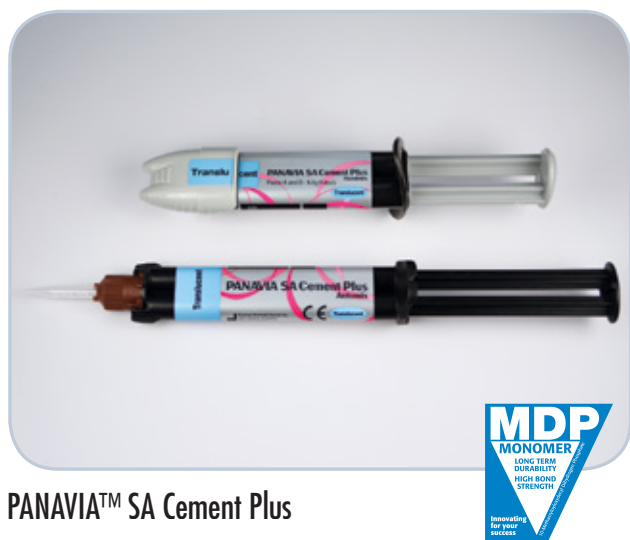
2) Must be used with ALLOY PRIMER

Posts	Adhesion to				Curing systems		
	Metal oxide ceramics	Silica-based ceramics	Precious metal	Non-precious metal	Curing type	Fluoride release	Page number
✓	✓	✓ 1)	✓ 2)	✓	dual-cure		38
✓	✓ 1)	✓ 1)	✓ 2)	✓ 2)	dual-cure		40
✓	✓	✓ 1)	✓ 2)	✓	dual-cure	✓	42
✓	✓	✓ 1)	✓ 2)	✓	self-cure	✓	44

RESIN CEMENTS

Self-Etching/Self-Adhesive Resin Cement

PANA VIA™ SA Cement Plus



PANA VIA™ SA Cement Plus

Facts

- Exceptional handling, especially with excess cement removal
- Very low technique sensitivity, with consistent bond strength even to overdry and wet dentin/enamel
- High bond strength, for any restorations including Zirconia and Alumina
- Excellent marginal sealing, protection from marginal leakage
- Low solubility and low film thickness, for optimal cementation
- Simple to use, self-adhesive, no primers, silane or bonding agents needed
- Fluoride-releasing
- Available in automix or economical handmix
- Fast light-curing (10 sec.)
- Stable at room temperature

Indications

- Cementation of crowns, bridges, inlays, and onlays made of conventional porcelain, ceramic, hybrid ceramics, composite resin or metal
- Cementation of metal cores, resin cores, metal posts or glass-fiber posts

- Cementation to implant abutments
- Cementation of adhesion bridges and splints
- Amalgam bonding

Description

PANA VIA™ SA Cement Plus is a self-adhesive resin cement that features a dual-cure (light- and/or self-cure) formulation, automix delivery, and is fluoride-releasing. It has been developed for cementing indirect restorations made of metal, all-ceramic (Zirconia, Alumina), or composite. PANA VIA™ SA Cement Plus does not require phosphoric acid treatment or any special primer or adhesive for bonding to tooth structure. This simplified self-adhesive resin cement provides a higher level of adhesion and mechanical strength compared with other general-purpose cements (including self-adhesive cements, glass ionomer cements, resin-modified glass ionomer cements, zinc phosphate cements, or polycarboxylate cements). PANA VIA™ SA Cement Plus resolves problems encountered with complicated procedures and insufficient bond strength in the cementing of crowns, bridges, inlays and onlays, or cementing prefabricated dental posts in daily clinical cases. PANA VIA™ SA Cement Plus' adhesive strength is rarely affected by the dryness on the adherent surface of the tooth structure, due to Kuraray's adhesion technology (based on a proprietary adhesive phosphate monomer). In addition, the water sorption of PANA VIA™ SA Cement Plus is lower than that of most general luting cements, resulting in a product that is very forgiving in clinical technique and application. In addition, this reliable and simplified self-adhesive cement offers unrivaled easy removal of excess cement. Excess removal and clean-up is accomplished very quickly with short chair time and without damaging the gingiva. PANA VIA™ SA Cement Plus provides the benefits of resin cement, the features of glass ionomer and Kuraray's legendary adhesive technology.

Product Codes

PANAVIA SA Cement Plus Automix

3382KA Universal (A2)

3383KA White

3384KA Translucent

Content: 1 syringe:

- Paste A: 4.3 g (2.3 ml)
- Paste B: 4.0 g (2.3 ml)

Mixing Tip: 20 tips

PANAVIA SA Cement Plus Hand Mix

3352KA Universal (A2)

3353KA White

3354KA Translucent

Content: 1 syringe:

- Paste A: 4.4 g (2.5 ml)
- Paste B: 4.2 g (2.5 ml)

Value Kits

PANAVIA™ SA Cement Plus Automix VALUE KIT

3385KA Universal (A2)

3387KA Translucent

Content: 3 syringes:

- Paste A: 4.3 g (2.3 ml)
- Paste B: 4.0 g (2.3 ml)

Mixing tip: 2 x 20 tips

Endo tip: 10 tips

Refills

#3391KA PANAVIA™ SA Cement Plus Mixing Tips, pack of 20

#3392KA PANAVIA™ SA Cement Plus Endo Tips, pack of 20

Integrated System Recommendations



#2831KA CLEARFIL™ DISPENSER (5 ml)

CLEARFIL™ DISPENSER makes paste dispensing easier and more controllable, especially for endodontic use.



2550KA
CLEARFIL™ CERAMIC PRIMER (4 ml)
You can also use CLEARFIL™ CERAMIC PRIMER
without mixing (please see page 32).



CLEARFIL™ ESTHETIC CEMENT EX



CLEARFIL™ ESTHETIC CEMENT EX

Facts

- Virtually no post-operative sensitivity / dentin sealing with a self-etch bond
- Easy to use with automix dispensing directly into restorations
- Try-in paste accurately matches the cement color and film thickness
- Bond strength higher than most other cements, including the industry-standard PANAVIA™
- Minimum shade selection for very wide applications
- Superior physical properties, including strong wear resistance
- Most cementation needs combined in one kit

Indications

- Cementation of crowns, bridges, inlays and onlays made of porcelain, ceramic, hybrid ceramic, composite resin or metal
- Cementation of veneers
- Cementation of adhesion bridges
- Cementation of metal cores, resin cores, metal posts or glass-fiber posts

Description

A significant increase in ceramic (including zirconium oxide and aluminum oxide) restorations has been noted in recent years, as has the steady rise of metal-free restorations. This trend will continue to gather force. CLEARFIL™ ESTHETIC CEMENT EX has been developed to meet this need. CLEARFIL™ ESTHETIC CEMENT EX is available in 4 color shades which can be used with CLEARFIL™ CERAMIC PRIMER to offer strong adhesion to esthetic materials. The light-cure generates good marginal sealing of the restoration and high wear resistance of the cement surface. The Try-in pastes allow you to test the color you wish to use for the restoration, and they can be easily and quickly washed away. The practical automix syringe mixes the two pastes of the cement. The cement can be applied directly into the restoration without creating air bubbles. For intra-oral repair using CLEARFIL™ CERAMIC PRIMER, see page 32. For direct restorations using CLEARFIL™ DC BOND, see page 26.

Automix Syringe

The CLEARFIL™ ESTHETIC CEMENT EX kit contains a compact Automix Syringe which eliminates the need for mixing. The Try-in paste accurately conforms to the color and film thickness of the cement. The cement is easy to handle.



Product Codes

Standard Kit

CLEARFIL™ ESTHETIC CEMENT EX

(kit is available in 3 shades)

#2901KA Universal Kit

#2903KA Clear Kit

#2904KA Opaque White Kit

1 CLEARFIL ESTHETIC CEMENT EX Paste A 4.6 g (2.3 ml), Paste B 4.4 g (2.3 ml), 1 Try-in paste (1.8 ml), 1 CLEARFIL DC BOND Liquid A (4 ml), 1 Liquid B (4 ml), 1 CLEARFIL CERAMIC PRIMER (4 ml), 1 K-etchant GEL (6 ml), 1 ALLOY PRIMER (5 ml), 20 Mixing tips, 1 Light-blocking plate, 1 Mixing dish, 50 Disposable brush tips (white), 50 Disposable brush tips (black), 1 Brush tip handle (white), 1 Brush tip handle (black)

Mini Kit

CLEARFIL™ ESTHETIC CEMENT EX

(kit is available in 3 shades)

#2911KA Universal Kit

#2913KA Clear Kit

#2914KA Opaque White Kit

1 CLEARFIL ESTHETIC CEMENT EX Paste A 2.4 g (1.2 ml), Paste B 2.3 g (1.2 ml), 1 Try-in paste (1.8 ml), 1 CLEARFIL DC BOND Liquid A (1 ml), 1 Liquid B (1 ml), 1 CLEARFIL CERAMIC PRIMER (2 ml), 10 Mixing tips, 1 Light-blocking plate, 1 Mixing dish, 50 Disposable brush tips (white), 1 Brush tip handle (white)

Refills

#2921KA CLEARFIL™ ESTHETIC CEMENT EX Universal Paste A 4.6 g (2.3 ml) and B 4.4 g (2.3 ml)

#2922KA CLEARFIL™ ESTHETIC CEMENT EX Chroma Paste A 4.6 g (2.3 ml) and B 4.4 g (2.3 ml)

#2923KA CLEARFIL™ ESTHETIC CEMENT EX Clear Paste A 4.6 g (2.3 ml) and B 4.4 g (2.3 ml)

#2924KA CLEARFIL™ ESTHETIC CEMENT EX Opaque White Paste A 4.6 g (2.3 ml) and B 4.4 g (2.3 ml)

#2931KA CLEARFIL™ ESTHETIC CEMENT EX Try-in Paste Universal 2.4 g (1.8 ml)

#2932KA CLEARFIL™ ESTHETIC CEMENT EX Try-in Paste Chroma 2.4 g (1.8 ml)

#2933KA CLEARFIL™ ESTHETIC CEMENT EX Try-in Paste Clear 2.4 g (1.8 ml)

#2934KA CLEARFIL™ ESTHETIC CEMENT EX Try-in Paste Opaque White 2.4 g (1.8 ml)

#2512KA CLEARFIL™ DC BOND 1 Bond Liquid A (4 ml)

#2513KA CLEARFIL™ DC BOND 1 Bond Liquid B (4 ml)

#2550KA CLEARFIL™ CERAMIC PRIMER (4 ml)

#013KA K-etchant GEL (6 ml)

#2935KA Mixing tips, pack of 20

#902KA Mixing dish

#906KA Spatula

#945KA Paper pad

#965KA Brush tip handle (white)

#966KA Brush tip handle (black)

#967KA Disposable brush tips (black), pack of 50

#968KA Disposable brush tips (white), pack of 50

Shade Matching & Shade Systems

Universal

A shade having a dentin color with an optimal average balance of hue, color, value, and transparency. Ideal for most inlays, onlays, and generally a wide range of shade matching cases.

Chroma

A shade that provides a higher chroma than the Universal shade, this shade is especially suitable for cases where high chroma is necessary at marginal areas of inlays and onlays.

Clear

A colorless and transparent shade is suitable for veneers, crowns and other cases where the underlying tooth color provides most of the color needs.

Opaque White

A shade with high opacity and higher value, suitable for veneers and other cases requiring higher value.

	UNIVERSAL	CHROMA	CLEAR	OPAQUE WHITE
Recommended Procedures				
Inlay/Onlay (Porcelain, All Ceramic, Hybrid Ceramics, Composite Resin, Metal)	●	●	●	●
Crown (Porcelain, All Ceramic, Hybrid Ceramics, Composite Resin, Metal)	●	●	●	●
Veneer (Porcelain, All Ceramic, Hybrid Ceramics, Composite Resin)	●	●	●	●
Post (Glass-Fiber, Metal)	●	●	●	●
Core (Resin, Metal)	●	●	●	●
Adhesion Bridge/Adhesion Splint	●	●	●	●

● Recommended ● Adequate ● Acceptable

PANA VIA™ F 2.0



PANA VIA™ F 2.0 Complete Kit



Facts

- MDP adhesive monomer
- Self-cure or light-cure
- One-step, self-etch primer "ED Primer II" significantly reduces sensitivity
- Convenient working and setting times with high bond strength
- Fluoride-releasing
- Radiopaque and insoluble
- Complete kit includes everything for cement procedure

Indications

- Cementation of crowns, bridges, inlays and onlays made of conventional porcelain, ceramic, hybrid ceramics, composite resin or metal
- Cementation of veneers
- Cementation of adhesion bridges
- Cementation of metal cores, resin cores, metal posts or glass-fiber posts
- Amalgam bonding

Description

PANA VIA™ F 2.0 is a universal resin cement which shows high bond strength for all indications and materials. PANA VIA™ F 2.0 has been regarded as an exponent for permanent adhesion technique in the areas of all ceramic and metal restorations, especially for high quality and difficult cases. It is recommended by leading universities as a premium product. The resin cement has rare post-operative sensitivity and provides consistently good results. The anaerobic curing properties (which do not begin until direct contact has been made with the restoration; no more contact with oxygen; and flexible consistency) make PANA VIA™ F 2.0 a popular aid in daily practice. Even after releasing fluoride, the cement maintains its high mechanical strength, due to the special surface coating technology of sodium fluoride.

Product Codes

PANA VIA™ F 2.0 Complete Kit

#501KA PANA VIA™ F 2.0 Complete Kit TC (tooth color)
 #502KA PANA VIA™ F 2.0 Complete Kit White
 #503KA PANA VIA™ F 2.0 Complete Kit Opaque
 #504KA PANA VIA™ F 2.0 Complete Kit Light
 1 PANA VIA™ F 2.0 Paste A 5.0 g (2.3 ml), 1 PANA VIA™ F 2.0 Paste B 4.6 g (2.3 ml), 1 ED PRIMER II liquid A (4 ml), 1 ED PRIMER II Liquid B (4 ml), 1 CLEARFIL™ CERAMIC PRIMER (2 ml), 1 ALLOY PRIMER (1 ml), 1 PANA VIA™ F 2.0 OXYGUARD™ II (6 ml), 1 Spatula, 1 Mixing pad, 4x5 Disposable brush tips, 1 Brush tip handle, 1 Mixing dish, 1 Light-blocking plate, 4x5 Disposable nozzles

PANA VIA™ F 2.0 (Introductory Kit)

#480KA PANA VIA™ F 2.0 TC (tooth color)
 #481KA PANA VIA™ F 2.0 White
 #482KA PANA VIA™ F 2.0 Opaque
 #483KA PANA VIA™ F 2.0 Light
 1 PANA VIA™ F 2.0 Paste A: 2.1 g (1 ml), 1 PANA VIA™ F 2.0 Paste B: 1.9 g (1 ml), 1 ED Primer II Liquid A (1 ml), 1 ED Primer II Liquid B (1 ml), 1 PANA VIA™ F 2.0 OXYGUARD™ II (1.5 ml); 1 Brush tip handle, Disposable brush tips (50), Disposable nozzles (5), 1 Light-blocking plate, 1 Mixing pad

Refills

- #493KA PANAVIA™ F 2.0 A Paste: 5.0 g/2.3 ml
- #494KA PANAVIA™ F 2.0 B Paste (TC): 4.6 g/2.3 ml (tooth color)
- #495KA PANAVIA™ F 2.0 B Paste (White): 4.6 g/2.3 ml
- #496KA PANAVIA™ F 2.0 B Paste (Opaque): 4.6 g/2.3 ml
- #497KA PANAVIA™ F 2.0 B Paste (Light): 4.6 g/2.3 ml
- #491KA PANAVIA™ F 2.0 ED Primer II Liquid A: 4 ml
- #492KA PANAVIA™ F 2.0 ED Primer II Liquid B: 4 ml
- #490KA PANAVIA™ F 2.0 OXYGUARD™ II: 6 ml
- #902KA Mixing dish
- #906KA Spatula
- #917KA Disposable nozzles (OXYGUARD™ II) (20)
- #945KA PANAVIA™ 21/F 2.0 Mixing pad (M)
- #965KA Brush tip handle (white)
- #967KA Disposable brush tips (black), pack of 50

Available in four color shades

TC (tooth color) Color support for the natural tooth.

Light Lighter than TC.

White Opaque; affects dark tooth and tooth discolorations optimally and naturally.

Opaque Covers the underlying surface completely. Especially suitable for precious/non-precious alloys and adhesion/Maryland bridges. Opaque paste should not be light-cured, but allowed to self-cure with the use of OXYGUARD™ II.



RESIN CEMENTS

Self-Cure, Self-Etch

PANA VIA™ 21



PANAVIA™ 21 Kit

Facts

- MDP adhesive monomer
- High bond strength to enamel, dentin, metal, metal alloys, ceramics and composite resin restorations
- Reliable cement system with a self-etch “ED Primer” for tooth structure
- User-friendly dispenser
- Available in EX (white), TC (tooth color) and OP (opaque)
- Radiopaque and insoluble

Indications

- Cementation of “adhesion” bridges or splints
- Cementation of metal crowns, bridges and inlays/onlays
- Cementation of silanated porcelain and cured composite crowns or inlays/onlays
- Cementation of preformed posts or cast post and cores
- Bonded amalgam restorations

Description

PANAVIA™ 21 is an anaerobic-curing adhesive resin cement which cures only when oxygen is eliminated, i.e., when there is direct contact between two surfaces. This provides for optimal

working time since the pastes cannot cure before the restoration has been inserted. PANAVIA™ 21 develops a reliable adhesive strength between tooth structure and restorations. Its use in combination with the self-etch ED Primer makes an effective and gentle preparation of enamel and dentin in one step. Etching with acidic agents and rinsing becomes unnecessary, eliminating post-operative sensitivity. The enclosed etching gel is to be used on uncut enamel and adhesion bridge cases.

Product Codes

- #450KA PANAVIA™ 21 EX Kit (white)
- #460KA PANAVIA™ 21 TC Kit (tooth color)
- #470KA PANAVIA™ 21 OP Kit (opaque)
- 1 PANAVIA™ 21 Catalyst: 7.9 g (4 ml), 1 PANAVIA™ 21 Universal: 7.6 g (4 ml), 1 ED Primer Liquid A (4 ml), 1 ED Primer Liquid B (4 ml), 1 OXYGUARD™ II (6 ml), 1 PANAVIA™ Etching Agent V (5 ml), 1 Paste dispenser, 1 Mixing pad, 1 Spatula, 1 Mixing dish, 1 Box sponge pledgets, 2 Brush tip handles (white & black), 2x50 Disposable brush tips

Refills

- #455KA PANAVIA™ 21 EX Catalyst paste: 7.9 g (4 ml) & Universal paste: 7.6 g (4 ml)
- #465KA PANAVIA™ 21 TC Catalyst paste: 7.9 g (4 ml) & Universal paste: 7.6 g (4 ml)
- #475KA PANAVIA™ 21 OP Catalyst paste: 7.9 g (4 ml) & Universal paste: 7.6 g (4 ml)
- #1053KA ED Primer Liquid A: 4 ml
- #1054KA ED Primer Liquid B: 4 ml
- #032KA OXYGUARD™ II: 6 ml
- #016KA PANAVIA™ Etching Agent V: 5 ml
- #902KA Mixing dish
- #906KA Spatula
- #930KA PANAVIA™ 21 Dispenser
- #941KA Sponge pledget
- #945KA PANAVIA™ 21/F 2.0 Mixing pad (M)
- #965KA Brush tip handle (white)
- #966KA Brush tip handle (black)
- #967KA Disposable brush tips (black), pack of 50



RESTORATIVE COMPOSITES

The Fusion of Beauty, Strength and Usability

Too often dental professionals are forced to sacrifice one important quality for another in their dental products. Ease of use gives way to esthetics, or the need for structural reinforcement can override cosmetic factors. Finally, there is a product line that requires zero compromise. Kuraray CLEARFIL MAJESTY™ ES-2, Flow, ES Flow and Posterior restorative composites fuse beauty, strength and usability into one integrated system.

Now dentists can restore function and integrity to damaged and decayed teeth with confidence. Kuraray's composites offer state-of-the-art technology in natural looking restorations. With advanced esthetics and superior strength, CLEARFIL MAJESTY™ ES-2, Flow, ES Flow, and Posterior offer a composite solution for almost every restorative situation.

Breakthrough Technology for Total Composite Satisfaction

Esthetic dental composites were first introduced in the 1960's, but suffered serious limitations in their physical properties and

durability. Developments in polymer science over the last two decades have allowed for vast improvements in shade matching, translucency, resilience and shrinkage, creating beautiful and reliable restorations.

Kuraray, through intensive research and development, has arrived at the forefront of composite technology. Nationwide testing among hundreds of doctors told us exactly what dental professionals want in a composite, and we responded. Dentists who use the CLEARFIL MAJESTY™ line of products have reported increased durability, improved usability and complete patient satisfaction in both comfort and appearance.

Ideal Solutions

Advantages of CLEARFIL MAJESTY™'s composite resins include:

- Advanced esthetics in light diffusion and polishability
- Exceptional strength
- Flexible shade matching
- Low polymerization shrinkage
- Radiopacity
- An easy to use product from a certified biocompatible, integrated system



Dental professionals can give patients beautiful anterior and posterior restorations and repairs with Kuraray's CLEARFIL MAJESTY™ line of natural-looking, strong, easy-to-match, and easy-to-use composites.





CLEARFIL™ Restorative Composites

RESTORATIVE COMPOSITES

Overview

		Page number	Class I 
	CLEARFIL MAJESTY™ ES-2 Series	48	
	CLEARFIL MAJESTY™ ES Flow	52	
	CLEARFIL MAJESTY™ Flow	53	
	CLEARFIL MAJESTY™ Posterior	54	
	CLEARFIL™ AP-X	55	

Recommended
 Adequate
 OK, but not recommended

Class II	Class III	Class IV	Class V	Radiopaque	Shades
					
				Yes	18 VITA Approved Classic Shades 5 Premium Shades (Enamel & Dentin) 4 Translucent Shades
		 *		Yes	10 shades
		 *		Yes	12 shades
				Yes	6 shades
				Yes	14 shades for Syringes, 8 shades for PLTs

*for liner use only

CLEARFIL MAJESTY™ ES-2 Classic



CLEARFIL MAJESTY™ ES-2 Classic Syringe & PLT

Facts

- The ONLY composite with VITA Approved Shades which match the VITA Classical Shade Guide
- Unsurpassed natural shade blending with surrounding tooth structure
- Single shade placement technique, no complex multi-shade layering due to Kuraray's pioneering LD (light-diffusion) Technology
- Easy polishing with durable gloss
- Long working time for easy sculpting with no slumping
- Universal for anterior and posterior use
- Virtually no post-cure color change

Indications

- Direct restorations for anterior and posterior teeth (Class I – V cavities)
- Direct veneers
- Correction of tooth position and tooth shape (e.g. diastema closure, dwarfed tooth, etc.)
- Intra-oral repairs of fractured crowns/bridges

Description

CLEARFIL MAJESTY ES-2 Classic is a light-cure, radiopaque universal nano-hybrid composite – the only composite with VITA approved shades. CLEARFIL MAJESTY ES-2 Classic features a single-shade, intuitive color matching system with Kuraray's proprietary LD, or light-diffusion technology. This new LD Technology is like having millions of micro-sized prisms, all refracting and transmitting color and light from the surrounding dentin and enamel through the composite. Precise color blending that begins at placement and continues from one visit to the next. CLEARFIL MAJESTY ES-2 also has a consistency that is easy to shape, with high polishability and low polymerization shrinkage.

Syringes: 3.6 g / 2.0 ml
 PLTs: 20 plts (0.25 g each)

Available Shades (Syringes & PLTs)

Syringe	PLT	Shade
#3020-KA	#3110-KA	A1
#3021-KA	#3111-KA	A2
#3022-KA	#3112-KA	A3
#3023-KA	#3113-KA	A3.5
#3024-KA	#3114-KA	A4
#3025-KA	#3115-KA	A6
#3026-KA	#3116-KA	B1
#3027-KA	#3117-KA	B2
#3028-KA	#3118-KA	B3
#3029-KA	#3119-KA	B4
#3030-KA	#3120-KA	C1
#3031-KA	#3121-KA	C2
#3032-KA	#3122-KA	C3
#3033-KA	#3123-KA	C4
#3034-KA	#3124-KA	D2
#3035-KA	#3125-KA	D3
#3036-KA	#3126-KA	XW
#3037-KA	#3127-KA	W
Shade Guide	#3000KA	Compact Shade Guide

CLEARFIL MAJESTY™ ES-2 Premium



CLEARFIL MAJESTY™ Premium

Facts

- The ONLY composite with a VITA Approved Shade Concept
- Unsurpassed natural shade blending with surrounding tooth structure
- Light diffusion property similar to natural teeth
- Long working time for easy sculpting with no slumping
- Easy polishing with durable gloss
- Universal for anterior and posterior use
- Virtually no post-cure color change
- Direct restorations for anterior and posterior teeth (Class I-V cavities)
- Direct veneers
- Correction of tooth position and tooth shape (e.g. diastema closure, dwarfed tooth, etc.)
- Intraoral repairs of fractured crowns/bridges
- E shade for enamel replacement
- D shade for dentin replacement

Indications

- Direct restorations for anterior and posterior teeth (Class I - III, V cavities, cervical caries, root erosion)
- Cavity base / liner
- Intra-oral repairs of fractured crowns/bridges/composite resin

Description

CLEARFIL MAJESTY ES-2 Premium is redefining composite technology. With the only VITA approved shade concept, Kuraray's new composite material covers 15 VITA classical shades with only five enamel and dentin shades. Kuraray's proprietary light-diffusion, or LD technology, adds the finishing touch, easily blending to the color of the surrounding tooth structure. Available in syringe or PLT (preloaded tip), CLEARFIL MAJESTY ES-2 Premium combines exceptional aesthetics and economical value, perfect for any dental practice.

Syringes: 3.6 g / 2.0 ml
 PLTs: 10 plts (0.25 g each)

Available Shades (Syringes & PLTs)

Syringe	PLT	Shade
#3050-KA	#3140-KA	A1E
#3051-KA	#3141-KA	A2E
#3052-KA	#3142-KA	A3E
#3053-KA	#3143-KA	A3.5E
#3054-KA	#3144-KA	A4E
#3055-KA	#3145-KA	XWE
#3056-KA	#3146-KA	WE
#3057-KA	#3147-KA	A1D
#3058-KA	#3148-KA	A2D
#3059-KA	#3149-KA	A3D
#3060-KA	#3150-KA	A3.5D
#3061-KA	#3151-KA	A4D
#3062-KA	#3152-KA	XWD
#3063-KA	#3153-KA	WD

Translucent Shades

Syringe (1.8 g / 0.9 ml)	PLT (0.25 g)	Shade
#3064-KA	#3154-KA	Clear
#3065-KA	#3155-KA	Amber
#3066-KA	#3156-KA	Blue
#3067-KA	#3157-KA	Gray

Shade Guide #3000KA Compact Shade Guide

TECHNIQUE GUIDE

Lightness/Value based shade taking with unique CLEARFIL MAJESTY ES-2 Shade guide

(For most restorations, 'VITA Classical shade guide' also can be used.)

Option of single (Classic) and dual (Premium) shade systems

Classic : Single-shade technique by VITA Approved Shades incorporating Kuraray light diffusion technology

Premium : Dual-shade technique by VITA Approved Shade Concept

Biomimetic layering system

Dentin replaced with a Dentin shade and Enamel with Enamel shade

①

Shade Description Chart

Shade description and concept

Layering method	Shade category	Shade																
		XW	W	B1	A1	B2	D2	A2	C1	C2	A3	D3	B3	A3.5	B4	C3	A4	C4
Single-shade	Classic	XW	W	B1	A1	B2	D2	A2	C1	C2	A3	D3	B3	A3.5	B4	C3	A4	C4
Dual-shade	Premium	Enamel	XWE	WE	A1E			A2E			A3E			A3.5E			A4E	
		Dentin	XWD	WD	A1D			A2D			A3D			A3.5D			A4D	

※A, B, C & D shades represent VITA Classical shades. XW stands for Extra White and W stands for White.

- When B1 to C4 (15 VITA Classical shades) are arranged according to the lightness and divided into five groups, 'A' shades represent the center of each group.
- In the Premium system, use the corresponding combination of Enamel and Dentin shades.
- Combination of each Premium shade (A shades) covers 3 VITA shades. For example, the dual-layer of A1E and A1D covers B1, A1 and B2.

Other shades

Shade category	Shade
Classic	A6
Translucent	Clear, Amber, Blue, Gray

- A6 has the lowest lightness in Classic shades.
- Translucent shades can be used for fine characterization of the restoration.

VITA approval only applies to VITA Classical shades and does not represent XW, W, A6 and Translucent shade categories.

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④ "VITA" is a trademark of VITA Zahnfabrik, Bad Sackingen, Germany.

07/2012

Single-shade technique (Classic system) 'VITA Approved Shades'

Shade-taking

Step 1:

Select the closest lightness/value tab from 6 exposed tab options of the Shade guide.

Step 2:

Pull out the chosen tab from the holder and select the corresponding shade.



Restoration

Class I



Class II



Class III



Class IV



Class V



Classic shade

②

Dual-shade Technique (Premium system) 'VITA Approved Shade Concept'

Shade-taking

Select the closest lightness/value tab from 6 exposed tab options of the Shade guide.

For teeth lighter than W (white) shade, pull-out the tab for XW (extra-white) shade taking.

Restoration

- Select the corresponding pastes of Premium shades (Enamel/Dentin). For example, when A1 tab is chosen, then select A1E and A1D shades.
- Replace dentin space with a respective Dentin shade, and enamel space with a respective Enamel shade.



Class I



Class II



Class III



Class IV



Class V



Enamel shade Dentin shade

③

CLEARFIL MAJESTY™ ES Flow



CLEARFIL MAJESTY™ ES Flow

Facts

- Exceptionally easy to polish due to special submicron fillers
- One-step polishing: a high level gloss is produced by simply wiping the cured composite with a gauze or cotton roll soaked in ethanol
- Filler particles designed to produce optimum polish retention
- High filler loading of 75wt% to provide superior mechanical properties
- Special cluster fillers produce a light-diffusion property
- On-demand syringe delivery with bubble-free dispensing

Indications

- Direct restorations for all cavity classes, cervical lesions, tooth wear, and tooth erosion
- As a cavity base/liner
- Corrections of tooth position and shape
- Intraoral repair of fractured restorations

Description

CLEARFIL MAJESTY™ ES Flow is a light-cure, universal, flowable composite developed by using special submicron fillers that make it easy to polish. A high level gloss can be achieved by simply wiping the cured resin with a gauze or cotton roll soaked in ethanol. This one-step polishing produces a smooth surface which reduces plaque accumulation.

Special submicron fillers are surface treated with a proprietary silane coupling agent, which allows for the high filler loading of 75wt% to provide superior mechanical properties. These submicron fillers also provide a high level of gloss, while special cluster fillers bring a light diffusion property to the product. CLEARFIL MAJESTY™ ES Flow has superior handling and sculptability, and is not sticky or runny. Combined with a light-diffusion property, high polishability and high mechanical strength, CLEARFIL MAJESTY™ ES Flow is truly a universal flowable composite.

Syringes: 2.7g (1.5ml) with 15 needle tips.

Refills

#3331KA Needle Tip (N) 20pcs.

Available Shades (Syringes)

Syringe	Shade	Syringe	Shade
#3301KA	A1	#3306KA	KA6
#3302KA	A2	#3307KA	B1
#3303KA	A3	#3308KA	B2
#3304KA	A3.5	#3309KA	XW
#3305KA	A4	#3312KA	W

CLEARFIL MAJESTY™ Flow



CLEARFIL MAJESTY™ Flow

Facts

- High radiopacity for better radiographic detection
- New syringe with on-demand delivery and bubble-free dispensing
- Very high filler loading (81wt%) and (62vol%) for exceptional strength and wear resistance even for posterior restorations
- Liner material or restorative material with dentin-like properties
- Lowest polymerization shrinkage of the current flowables
- Medium viscosity so it stays where you place it, yet it flows where it needs to
- Esthetic shades for optimal cosmetic results

Indications

- Direct restorations for anterior and posterior teeth (Class I - III, V cavities, cervical caries, root erosion)
- Cavity base / liner
- Intra-oral repairs of fractured crowns/bridges/composite resin

Description

CLEARFIL MAJESTY™ Flow is a flowable, superfilled, light-cure, radiopaque restorative composite resin with the filler particles treated with a proprietary new surface coating technology. The resulting resin matrix is reinforced with a high filler loading of 81 wt%, a loading similar to many universal composite resins. In addition to the high filler loading, CLEARFIL MAJESTY™ Flow has a low viscosity for good handling and easy placement. CLEARFIL MAJESTY™ Flow exhibits high mechanical properties (compressive strength: 329MPa, flexural strength: 145MPa), high wear resistance, high radiopacity (290 %Al) and very low polymerization shrinkage. These features make it a very versatile product with multiple uses (including as a universal composite resin, e.g. Class I, II). CLEARFIL MAJESTY™ Flow has excellent consistency, appropriate flowability, and is not runny or sticky. CLEARFIL MAJESTY™ Flow restorations will not pull away from the margins or surrounding walls. Equally significant is the new CLEARFIL MAJESTY™ Flow dispenser, a new syringe that provides virtually bubble-free and controllable dispensing, as well as dramatically easy handling.

This picture visually illustrates the superior viscosity of CLEARFIL MAJESTY™ Flow that makes it incredibly easy to use with great handling.

Syringes: 3.2 g / 1.5 ml with needle tips (15)

Available Shades (Syringes)

Syringe	Shade	Syringe	Shade
#2610KA	A1	#2618KA	C3
#2611KA	A2	#2619KA	D3
#2612KA	A3	#2620KA	E2
#2613KA	A3.5	#2621KA	CV
#2615KA	B1	#2632KA	OA3
#2616KA	B2	#2635KA	BL2



CLEARFIL MAJESTY™ Posterior



CLEARFIL MAJESTY™ Posterior & CLEARFIL MAJESTY™ Posterior PLT

Facts

- Highest filler loading (92 wt%, 82 vol%)
- High surface hardness, close to human enamel (high wear resistance), but friendly against an antagonist tooth
- High mechanical properties (strength, durability) and high curing depth
- Low polymerization shrinkage and low thermal expansion
- Better marginal adaptation, even for a long time period
- Easy handling
- Versatile, simple, accurate shade selection for posterior restorations

Indications

- Direct restorations for anterior and posterior teeth (Class I – V cavities)
- Correction of tooth position and tooth shape (e.g. diastema closure, dwarfed tooth, etc.)
- Intra-oral repairs of fractured crowns/bridges

Description

CLEARFIL MAJESTY™ Posterior is a light-cure, radiopaque restorative composite resin composed of nano- and micro-inorganic filler, treated with a proprietary new surface coating technology. The new surface technology permits a larger quantity of nanofiller to be dispersed in the resin matrix, which consists of monomer and microfiller. The resulting resin matrix is reinforced with a filler loading of 92 wt% (82 vol%).

CLEARFIL MAJESTY™ Posterior has an improved high surface hardness close to that of human enamel (high wear resistance, but friendly against an antagonist tooth), high mechanical strength (compressive strength: 504 MPa, flexural strength: 177 MPa), high durability, high curing depth, low polymerization shrinkage (1.5 vol%) and a low thermal expansion coefficient. These features assure a reliable posterior restoration with better marginal adaptation and a restoration that will last. In spite of the extremely high filler loading, CLEARFIL MAJESTY™ Posterior has an easy-to-shape consistency. The high refractive matrix provides another essential benefit: very minor transparency shift after light-curing.

Syringes: 4.9 g / 2.0 ml
 PLTs: 20 plts (0.25 g each)

Available Shades (Syringes & PLTs)

Syringe	PLT	Shade
#2580KA	#2691KA	A1
#2581KA	#2692KA	A2
#2582KA	#2693KA	A3
#2586KA	#2695KA	B2
#2593KA	#2700KA	E2
#2594KA	#2701KA	E3



CLEARFIL™ AP-X



CLEARFIL™ AP-X & CLEARFIL™ AP-X PLT

Facts

- Superior physical properties
- High strength, resistance, and durability
- High polishability
- Accurate color matching
- Radiopaque
- Easy handling, no stickiness
- Available in syringes and PLTs

Indications

- Class I, II, V restorations of posterior teeth
- Class III, IV, V restorations of anterior teeth
- Cervical cavities or defects involving tooth surfaces

Description

CLEARFIL™ AP-X is a light-cured composite resin for Anterior and Posterior restorations. It offers accurate color matching; easy handling and high strength. Available in both syringe and PLT delivery systems, CLEARFIL™ AP-X offers the practitioner one product for all restorations.

Available Shades (PLTs & syringes)

Available shades (Syringes)

#1721KA	A2	4.6 g
#1722KA	A3	4.6 g
#1723KA	A3.5	4.6 g
#1724KA	A4	4.6 g
#1725KA	B2	4.6 g
#1726KA	B3	4.6 g
#1727KA	B4	4.6 g
#1732KA	C1	4.6 g
#1728KA	C2	4.6 g
#1729KA	C3	4.6 g
#1730KA	C4	4.6 g
#1731KA	XL	4.6 g
#1733KA	CL	4.6 g
#1734KA	H0	4.6 g

Available Shades (PLTs)

20 PLTs per package

#1741KA	A2	0.2 g
#1742KA	A3	0.2 g
#1743KA	A3.5	0.2 g
#1744KA	A4	0.2 g
#1745KA	B2	0.2 g
#1746KA	B3	0.2 g
#1751KA	XL	0.2 g
#1754KA	H0	0.2 g

RESTORATIVE COMPOSITES

Opaque Resin/Light-Cure Resin Glaze

CLEARFIL™ ST Opaquer



CLEARFIL™ ST Opaquer

Facts

- High opacity
- Immediate coverage of metal with a single application

Indications

- Masking of metal during intra-oral repair of porcelain-fused-to-metal crowns
- Masking of metal in restoration of post and core crowns
- Lightening of stained or discolored teeth in porcelain or composite veneer restorations
- Masking of pulp capping materials

Description

CLEARFIL™ ST Opaquer is a light-cure, opaque resin used to mask underlying metal darkness and tooth discoloration.

Product Codes

- #636KA L, (B1), 1 syringe: 4.0 g
- #637KA US, (A2), 1 syringe: 4.0 g

SURFACE COAT™



SURFACE COAT™

Facts

- Colorless, transparent gloss that “feels good” to your patient
- Glazed surface resists staining
- High gloss that can protect the restoration surface
- Excellent physical properties, especially surface hardness
- Virtually no oxygen inhibition layer
- Fast, simple application procedure
- Almost no color change after polymerization

Indications

- Direct and indirect composite resins
- Acrylic provisional crowns and bridges
- Acrylic appliances
- Glass ionomers and resin-modified glass ionomers

Description

SURFACE COAT™ is a light-cure composite glaze. It is colorless and transparent. The high gloss can protect the surface restorations of direct and indirect composite resins; glass ionomers and resin-modified glass ionomers; acrylic provisionals for crowns and bridges; and acrylic appliances, such as orthodontic appliances and removable prosthetic appliances.

Product Codes

- #263KA SURFACE COAT™: 5.0 ml

CORE BUILD-UP MATERIALS

The Strength of Technology

Long term durability and reliability are essential features of quality dental care, and dental professionals need to know that they can consistently rely on their dental products. Core build-up materials are only one aspect of daily practice, but their trusted high compressive strength, hardness, and adhesion are fundamental in the construction of both vital and non-vital teeth.

Similar to constructing a building's foundation, dental professionals must select only the strongest and hardest core build-up materials to ensure a dependable tooth substructure. Enter the Kuraray CLEARFIL™ line of core build-up composites. Innovative and easy to use, Kuraray technology uses precise formulations that result in dependable restorations that last.

Feels Like Dentin, Cuts Like Dentin

With superior compressive and flexural strength, improved adhesive qualities and esthetically sound color, Kuraray's CLEARFIL™ DC CORE PLUS, CLEARFIL™ PHOTO CORE, and CLEARFIL™ CORE products are ideal for dependable core build-up. Balanced fillers, fast light-curing methods and a non-sticky formulation create the flexibility needed for a variety of substructure applications and procedures for both vital and non-vital teeth. After curing, our core build-ups have the added advantage of feeling and cutting like dentin.



CLEARFIL™ CORE Build-up

CORE BUILD-UP MATERIALS

High Polymerization Depth, Light-Cure

A Trusted Product Line

Kuraray CLEARFIL™ CORE build-up materials are part of a full line of restorative and esthetic composites, each specifically engineered to offer unique benefits. All of our products are specially designed to work with Kuraray bonding agents, cements and restorative composites to achieve strong, natural looking restorations. Advantages of Kuraray core build-ups include:

- Superior compressive strength and durability
- Easy handling
- Fast light-cure, self-cure or dual-cure choices
- Cuts like dentin
- Economical
- Radiopaque

Discover Kuraray CLEARFIL™ DC CORE PLUS, CLEARFIL™ PHOTO CORE and CLEARFIL™ CORE NEW BOND build-up composites: the technology that clinicians depend on for the fast and easy construction of strong, reliable core build-ups.

	Light-Cure	Self-Cure	Radiopaque	Number of Color Choices	Page Number
CLEARFIL™ DC CORE PLUS 	✓	✓	✓	2*	59
CLEARFIL™ PHOTO CORE 	✓		✓	1	60
CLEARFIL™ CORE NEW BOND 		✓	✓	1	62

*Dentin and White

CLEARFIL™ DC CORE PLUS



CLEARFIL™ DC CORE PLUS (White)
CLEARFIL™ DC CORE PLUS (Dentin)

Facts

- Excellent and desired physical properties
- Superior bond strength with CLEARFIL S³ BOND PLUS
- Flows with control; no matrix band needed
- Specially designed guide tip for deep root canals
- Long-term durability
- Post cementation
- Cuts and feels like dentin
- Radiopaque

Indications

- Core build-up of vital or non-vital teeth
- Post cementation with the use of CLEARFIL S³ BOND PLUS

Description

CLEARFIL DC CORE PLUS is a dual-cure, radiopaque two-component core build-up material supplied in a convenient automix delivery system. CLEARFIL DC CORE PLUS has superior compressive and flexural strength with a filler loading of 74wt%. CLEARFIL DC CORE PLUS cuts like dentin when being prepared, and affords long-term durability. Core build-ups are faster, easier and stronger than ever when used with our one-step

bonding agent: CLEARFIL S³ BOND PLUS, also offering the added benefits of fluoride-release and greatly reduced post-operative sensitivity. CLEARFIL DC CORE PLUS provides the dentist with the confidence of durable, lasting restorations.

Product Codes

#2942KA CLEARFIL DC CORE PLUS (Dentin)
#2943KA CLEARFIL DC CORE PLUS (White)
Catalyst paste 9.9 g (4.5 ml), Universal paste 9.8 g (4.5 ml),
Automix syringe, 20 Mixing tips, 20 Guide tips

Refills

#1029KA Guide Tip (L) (For DC CORE PLUS): 20 tips
#1030KA Guide Tip (S) (For DC CORE PLUS): 20 tips
#1031KA Mixing Tip (For DC CORE PLUS): 20 tips

Integrated System Recommendations



#2890KA CLEARFIL S³ BOND PLUS Set
#2893KA CLEARFIL S³ BOND PLUS Value Pack
(3 Bottles of Bond (4ml))
#2898KA CLEARFIL™ S³ BOND PLUS Unit Dose
Std. Pack, 0.1 ml (50) unit dose with
(50) applicator brushes
#2899KA CLEARFIL™ S³ BOND PLUS Unit
Dose Value Pack, 0.1 ml (100) unit dose
with (100) applicator brushes

CORE BUILD-UP MATERIALS

High Polymerization Depth, Light-Cure

CLEARFIL™ PHOTO CORE



CLEARFIL™ PHOTO CORE & CLEARFIL™ PHOTO CORE PLT

Facts

- High polymerization depth
- No increments needed
- Esthetic translucent shade
- Cuts like dentin
- Easy handling
- Radiopaque
- Non-stick formulation

Indications

- Core build-up of vital or non-vital teeth

Description

CLEARFIL™ PHOTO CORE is a light-cure core build-up composite for the most demanding esthetic requirements. The material has a balanced filler content (83 wt%, 65 vol%) which has been specifically selected for the construction of dependable core build-up. Thanks to its high polymerization depth, clinicians are able to simplify their procedure by eliminating copper bands, matrix bands, and incremental layering. CLEARFIL™ PHOTO CORE cuts like dentin after curing, is radiopaque and does

not stick to instruments during application, thanks to its special formula. With a compressive strength of 334 MPa, CLEARFIL™ PHOTO CORE is ideal for small or large core build-up on vital or non-vital teeth.

Product Codes

- #355KA CLEARFIL™ PHOTO CORE (3 syringes): 4.4 g/2 ml each
- #356KA CLEARFIL™ PHOTO CORE (1 syringe): 4.4 g/2 ml
- #366KA CLEARFIL™ PHOTO CORE PLT (30 tips): 0.4 g each

Integrated System Recommendations



- #1970KA CLEARFIL™ SE BOND
- #3270KA CLEARFIL™ SE BOND 2



- #2890KA CLEARFIL S³ BOND PLUS Set
- #2893KA CLEARFIL S³ BOND PLUS Value Pack (3 Bottles of Bond (4ml))
- #2898KA CLEARFIL S³ BOND PLUS Unit Dose (pack of 50 unit-dose 0.1 ml)
- #2899KA CLEARFIL S³ BOND PLUS Unit Dose Value Pack (pack of 100 unit-dose 0.1 ml)



- #2870KA CLEARFIL™ SE Protect Kit

CLEARFIL™ PHOTO CORE



Procedure Guide: CLEARFIL™ PHOTO CORE and PHOTO CORE PLT

<p>Apply PRIMER gently.</p>	<p>Dry with mild air flow.</p>	<p>Apply BOND.</p>	<p>Air flow gently.</p>
<p>Light-cure</p>	<p>Placement</p>	<p>Light-cure * Refer to the instructions for use about light-curing time.</p>	<p>Prepare the abutment tooth.</p>

CLEARFIL™ CORE NEW BOND



CLEARFIL™ CORE NEW BOND

Facts

- Cuts like dentin
- Economical use
- Simple handling
- Radiopaque
- Predictable curing

Indications

- Core build-up of vital or non-vital teeth

Description

CLEARFIL™ CORE NEW BOND is a self-cure composite core build-up material (filler content: 78 wt%, 63 vol%) that has a unique shade and high compressive strength. It is especially suitable for the construction of immediate core build-up. The contrasting esthetically sound color, the good adhesive properties, the characteristic setting qualities, and hardness which can be compared to dentin, make it possible to build a dependable substructure very simply and quickly. CLEARFIL™ CORE NEW BOND is suitable for the construction of both vital and non-vital teeth.

Product Code

#315KA CLEARFIL™ CORE NEW BOND
1 Catalyst paste 23 g & Universal paste 21 g



TEETHMATE™ DESENSITIZER



TEETHMATE™ DESENSITIZER Set

Facts

- Highly biocompatible with no gingival irritation
- Crystallizes to form HAp, which seals the dentinal tubules and enamel cracks
- No air blow; no light-cure; no film thickness
- Long term durability up to (6) months

Indications

- Exposed dentin (ex. cervical hypersensitivity; toothbrush abrasion; gingival recession)
- After scaling/root planing
- Before/After bleaching
- Treatment of prepared dentin for prosthetic cementation
- Treatment of prepared dentin for fillings
- Sealing enamel micro-cracks

Description

TEETHMATE DESENSITIZER is a powder/liquid Hydroxyapatite-based desensitizer (HAp) which seals the dentinal tubules with a durable “plug” which can last up to (6) months. It consists of two types of Calcium powder that are mixed with a liquid which contains water. The (15) second mix produces a “slurry”

which is scrubbed onto the affected area for (30) seconds with a superfine applicator. The material is rinsed from the site, offering the patient immediate relief.

TEETHMATE DESENSITIZER is biocompatible, and is safe for the gingiva. It does not cause any whitening of the soft-tissue, and has no negative influence on bonding agents/cements. The product can be used with both etch and rinse and self-etch adhesives.

When compared with other desensitizers in the market, TEETHMATE DESENSITIZER is moisture-tolerant and does not require the use of a curing light. Its multiple indications make it ideal for chairside use for both the dentist and hygienist.

Product Codes

#1210KA TEETHMATE DESENSITIZER Set
Powder: (6g); Liquid: (4.8ml); 1 mixing dish; 1 measuring spoon; 50 applicator brushes (superfine-white).

Refills

#1216KA TEETHMATE DESENSITIZER Powder (6g)
#1217KA TEETHMATE DESENSITIZER Liquid (4.8ml)
#902KA Mixing Dish
#1220KA TEETHMATE DESENSITIZER Measuring Spoon
#1221KA TEETHMATE DESENSITIZER Applicator Brushes (pack/50; superfine-white)

TEETHMATE™ F-1



TEETHMATE™ F-1 Kit

Facts

- High bond strength to enamel
- Proven adhesive MDP monomer
- Long-lasting fluoride-release with molecular stability
- Easy handling
- Convenient flow control

Indications

- Pit and fissure sealant

Description

The new, single-liquid formulation of TEETHMATE™ F-1 makes it fast and easy to provide patients with a great defense against caries. TEETHMATE™ F-1 is a fluoride-releasing, light-cure pit and fissure sealant material with strong adhesive properties. A newly developed pin application system simplifies the “flow control.” A stable copolymer which releases fluoride is one of Kuraray’s own inventions. TEETHMATE™ F-1 is an unfilled composite of low viscosity that penetrates deep into pits and fissures for better long-term sealing and minimal occlusal wear. The balanced product formula of TEETHMATE™ F-1 includes the adhesive MDP monomer, which is also used in the resin cement PANAVIA™ F 2.0 and the bonding system CLEARFIL™ SE BOND.

The special properties of the monomer MDP give TEETHMATE™ F-1 a genuine chemical adhesion and better retention on the etched tooth enamel.

Product Codes

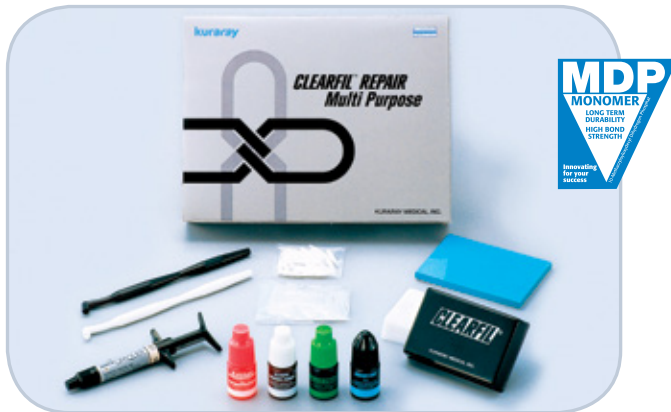
- #1760KA TEETHMATE™ F-1 Kit (natural)
- #1790KA TEETHMATE™ F-1 Kit (opaque)
- 2 Syringes (2.5 ml), 1 K-etchant GEL (6 ml), 2 Disposable nozzles (25 pcs), 1 Brush tip handle, Disposable brush tips (white, 50 pcs), 10 Mixing dishes

Refills

- #1765KA TEETHMATE™ F-1 (natural): 2.5 ml
- #1795KA TEETHMATE™ F-1 (opaque): 2.5 ml
- #013KA K-etchant GEL: 6 ml
- #912KA TEETHMATE™ Mixing dishes (25)
- #919KA TEETHMATE™ Applicator nozzles (25)
- #965KA Brush tip handle (white)
- #968KA Disposable brush tips (white), pack of 50



CLEARFIL™ REPAIR Multi Purpose



CLEARFIL™ REPAIR Multi Purpose

Facts

- Repairing fixed prosthetic restorations fabricated from porcelain, ceramic, hybrid ceramics, composite resin, or metal oxide restorations
- Very high bond strength to metal oxide, like Zirconia
- No toxic Hydrofluoric Acid (HF) needed
- Long, stable shelf-life
- Re-glazing porcelain and composite restorations

Procedure Guide: CLEARFIL™ REPAIR Multi Purpose



Indications

- Repairing fixed prosthetic restorations fabricated from porcelain, ceramics, hybrid ceramics, or composite resin (e.g., inlays/onlays, crowns, bridges, and the superstructure of implants)
- Re-glazing fixed intra-oral restorations (e.g., cured direct/indirect composite resin, provisionals, acrylic appliances, glass ionomers)

Description

CLEARFIL™ REPAIR Multi Purpose is a universal, light-cure adhesive system which enables the rapid repair of all tooth-related fractures. The system provides high bond strength in direct bonding procedures with protection against microleakage and minimal decalcification.

Product Code

- #1973KA CLEARFIL™ REPAIR Multi Purpose
 K-etchant Gel (6 ml),
 ALLOY PRIMER (5 ml),
 SURFACE COAT (5 ml),
 CLEARFIL™ CERAMIC PRIMER (4 ml),
 CLEARFIL™ ST OPAQUER US (4 g)
 1 Mixing dish, 1 Mixing pad,
 2 Brush tip handles (white & black),
 Disposable brush tips (50),
 Disposable flat brush tips (20),
 1 Light-blocking plate

Refills

- #013KA K-etchant Gel 6 ml
 #064KA ALLOY PRIMER 5 ml
 #263KA SURFACE COAT 5 ml
 #2550KA CLEARFIL™ CERAMIC PRIMER: 4 ml
 #637KA CLEARFIL™ ST OPAQUER US: 4 g
 #902KA Mixing dish
 #945KA PANAVIA™ Mixing pad (M)
 #965KA Brush tip handle (white)
 #966KA Brush tip handle (black)
 #968KA Disposable brush tips (white), pack of 50
 #1010KA Disposable brush tips, flat type, pack of 20

K-ETCHANT Syringe



K-ETCHANT Syringe

Facts

- Thixotropic properties provide controlled application
- 35% phosphoric acid
- Precise dispensing from needle tip

Indications

- Etching the enamel and dentin for adhesive restorations
- Selective-Etch technique

Description

The K-ETCHANT Syringe contains a thixotropic, 35% blue phosphoric acid gel which has a small diameter tip for precise placement. It can be used when either Selective-Etch/Total-Etch is desired. The gel is not runny or drippy, and stays in place until it is rinsed away.

Product Code

#3252KA K-ETCHANT Syringe Kit
2 K-ETCHANT Syringe (3ml); Needle tips (40 tips)
#3253KA K-ETCHANT Syringe Needle Tips (20 tips)

K-etchant GEL



K-etchant GEL

Facts

- Thixotropic properties provide controlled application
- 40% phosphoric acid

Indications

- Etching the enamel and dentin for adhesive restorations

Description

K-etchant GEL is a thixotropic etching gel which is used to etch tooth enamel, dentin, porcelain, hybrid ceramics and cured composites for adhesive restorations. Its special feature: When you shake the bottle, the material becomes liquefied, simplifying the application of K-etchant GEL. When it comes into contact with oxygen, it reverts to the gel state, ensuring that only those areas which are supposed to be treated are etched.

Product Code

#013KA K-etchant GEL: 6 ml

Caries Detector



Caries Detector

Facts

- Fast and easy to use
- Stains only non-remineralized carious dentin
- Helps clinicians to preserve healthy tissue

Indications

- Disclosing carious dentin in all cavity preparations

Description

Caries Detector is an excellent caries disclosing agent for conservative dentistry. It aids in the excavation of the outer decalcified and infected carious dentin layer, permitting optimal caries removal. It also helps minimize the removal of remineralized, healthy dentin, protecting the vitality of the pulp and, as a result, conserve the maximum amount of healthy tissue.

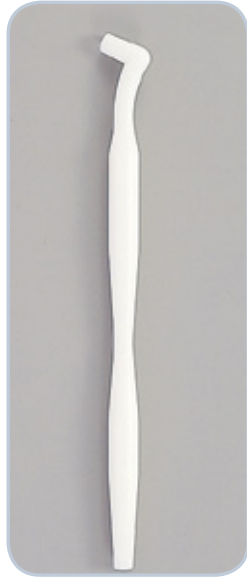
Product Code

#220KA Caries Detector
2 bottles: 6 ml x 2

Accessories



#966KA Brush tip handle
(black handle)



#965KA Brush tip handle
(white handle)



#930KA PANAVIA™ 21
Dispenser



#908KA Small Brush (bent)



#922KA PANAVIA™
Removing Brush



#941KA
Sponge Pledget



#967KA
PANAVIA™ 21 &
PANAVIA™ F 2.0 (black)
Disposable brush tips (50)



#917KA
Disposable nozzles
(OXYGUARD™ II): 20 nozzles



#968KA
SE and 2V(white)
Disposable brush tips (50)



#1010KA
Disposable flat brush tips
(white): 20 tips



#1015KA
Needle tips (CLEARFIL
MAJESTY™ Flow): 20 tips



#3331KA
Needle tips (CLEARFIL
MAJESTY™ ES Flow): 20 tips



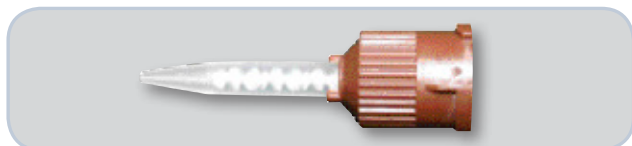
#1022KA
Dispensing dish and light
blocking plate

ADDITIONAL PRODUCTS & ACCESSORIES

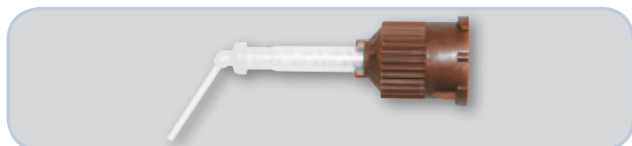
Accessories



#1029KA Guide Tip (L) (CLEARFIL DC CORE PLUS): 20 tips
 #1030KA Guide Tip (S) (CLEARFIL DC CORE PLUS): 20 tips
 #1031KA Mixing Tip (CLEARFIL DC CORE PLUS): 20 tips



#2935KA (CLEARFIL ESTHETIC CEMENT EX): 20 tips



#3391KA Mixing Tips (PANAVIA SA Cement Plus Automix): 20 Tips
 #3392KA Endo Tips (PANAVIA SA Cement Plus Automix): 20 tips



#906KA Mixing spatula



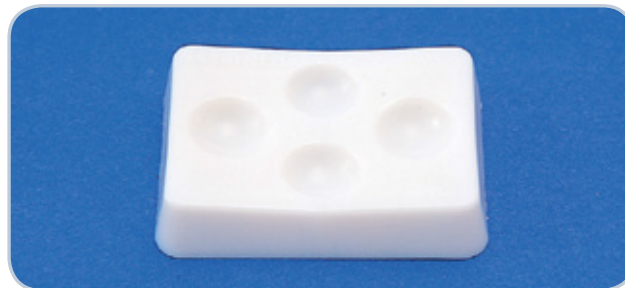
#904KA Small mixing pad, 1.65 x 2.58 inches



#945KA PANAVIA™ 21 & PANAVIA F 2.0 Mixing pad (M),
 2.21 x 3.27 inches



#924KA PANAVIA™ Mixing pad (L) 3.35 x 4.53 inches



#902KA Mixing dish (CLEARFIL™, PANAVIA™ 21)



#912KA TEETHMATE™ Mixing dish (25 disposable)



#953KA Mixing dish (PANAVIA™ F 2.0)



#2831KA PANAVIA™ SA CEMENT Plus Dispenser (5 ml)
 #2832KA CLEARFIL™ DC CORE PLUS Dispenser (10 ml)

NOTE, WARRANTY & CONTACT

Warranty

All data herein are based on actual measurements performed by Kuraray Noritake Dental Inc. All information contained herein is presented in good faith and without warranty.

Kuraray Noritake Dental Inc. will replace any product that is proved to be defective. Neither Kuraray Noritake Dental Inc., nor the distributor, accept liability for any loss or damage, direct, consequential or special, arising out of the application or use of or the inability to use these products. Before using, the user shall determine the suitability of the products for the intended use and the user assumes all risk and liability whatsoever in connection therewith.

Note

Please read *Instructions for Use* thoroughly before using these products.

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The image features a blue gradient background with a repeating pattern of interlocking loops and crosses. The Kuraray logo, consisting of a stylized cross symbol above the word "kuraray" in a lowercase, italicized sans-serif font, is positioned in the upper left. The background pattern is composed of various shades of blue, with the interlocking shapes becoming more prominent and darker as they move towards the bottom of the page.

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