

ULTRATHIN LAYERING. FUTUREPROOF YOUR LAB.

Low-fusing porcelains and internal stains for zirconia
or lithium disilicate dental restorations



**CERABIEN
Milai**

OUTSTANDING AESTHETICS AT THE FIRST GO

CERABIEN™ MiLai is a set of porcelains and internal stains specifically designed for the micro-layering technique. The name “MiLai” is derived from the term “micro-layering” and the Japanese word “mirai” (which means future). The innovative product based on synthetic feldspar enables dental technicians to add the final touch to their zirconia or lithium disilicate restorations in a simple and time-saving procedure – for outstanding aesthetics right from the start.





FEATURES & BENEFITS

1

MULTIPLE FRAMEWORK OPTIONS

Suitable for framework materials based on both oxide (zirconia) and silicate ceramics (lithium disilicate)*, reducing the need for multiple ceramic systems.

2

LOW-TEMPERATURE FIRING

Supporting compatibility with a broad range of restorative materials and laboratory workflows as well as the optical properties of the framework materials and long-term stability of the restorations.

3

EFFICIENT FINISHING PROCEDURES

Porcelain system designed for micro-layering, helping simplify daily workflows, reduce time and minimise inventory.

4

CONSISTENT HANDLING AND PERFORMANCE

Due to the use of synthetic feldspar porcelain, offering predictable handling characteristics and excellent mechanical properties, even after multiple firings.

*The material should have CTE value within $9.5\sim 11.0\times 10^{-6}/K$ (50~500 °C)

EFFICIENT PROCEDURES

Modern zirconia or lithium disilicate-based restorative materials have a high aesthetic potential, making extensive framework reduction and the application of multiple porcelain layers largely unnecessary. Instead, a monolithic design or a minimal vestibular cut-back can be created, followed by the application of a thin porcelain layer to reproduce the optical effects of natural tooth structure. This approach is referred to as MICRO-LAYERING – a simplified layering technique that combines efficiency with highly aesthetic results.



DIFFERENT KITS FOR INDIVIDUAL NEEDS

The CERABIEN™ MiLai line-up has been developed to support the evolving needs of modern dental laboratories by combining efficient finishing workflows with extensive aesthetic possibilities. Whether taking the first steps in micro-layering or seeking greater flexibility for more demanding cases, there is a kit to suit virtually every individual requirement.

No matter which kit you choose: For additional shade effects, a mixing of the porcelains is possible*.



INTERNAL STAIN KIT

Contains the complete set of 15 internal stains. Ideal for users focusing on the internal stain technique.



MICRO-LAYERING KIT

Contains a selection of 16 porcelains designed primarily for the reproduction of enamel and soft tissue. Ideal for users seeking a simple and efficient micro-layering workflow.



ADVANCED LAYERING KIT

Contains 20 additional porcelains that complement the Micro-Layering Kit. Designed for users who wish to further expand their layering possibilities and characterisation options.



POWDER STARTER KIT

Contains a selection of 7 porcelains and 5 internal stains. Provides everything needed for a smooth introduction to the micro-layering technique.

*Mixing with other CERABIEN™ MiLai porcelain shades is possible. Do not mix with any porcelains from other porcelain series or porcelains from other manufacturers.

MULTIPLE FRAMEWORK OPTIONS

740 °C LOW FIRING TEMPERATURE

The firing temperature of CERABIEN™ MiLai porcelains and internal stains is lower than that of CERABIEN™ ZR porcelains **(700 °C to 740 °C / 1292 °F to 1364 °F versus 930 °C / 1706 °F)**. This feature enables the aesthetic finishing of both oxide ceramic (e.g. zirconia) and silicate ceramic (e.g. lithium disilicate) restorations with a single porcelain system. As a consequence, the porcelain inventory is reduced and material selection is simplified.

If desired, CERABIEN™ MiLai porcelains and internal stains may even be applied over CERABIEN™ ZR, as the lower firing temperature does prevent any deformations in the existing porcelain work.



ONE CERAMIC SYSTEM.
MULTIPLE FRAMEWORK SOLUTIONS.
FOR ZIRCONIA AND LITHIUM DISILICATE.

BAKING SCHEDULE

	DRY- OUT TIME	PREDRYING TEMP.		START VACUUM		HEAT RATE		VACUUM LEVEL	RELEASE VACUUM		HIGH TEMPERATURE		HOLD TIME IN THE AIR	COOL TIME
	min.	°C	°F	°C	°F	°C / min.	°F / min.	kPa*1	°C	°F	°C	°F	min.	min.
Wash Bake	5	500	932	600	1112	45	81	96	740	1364	740	1364	1	4
Internal Stain	5	500	932	-	-	45	81	0	-	-	700	1292	-	4
Liner/Enamel/ Opacious Body/ Body/ Mamelon/ Translucent/ Luster/ Clear Cervical*2	7-10	500	932	600	1112	45	81	96	740-770	1364-1418	740-770	1364-1418	1	4
Minor Adjustment*2*3	7-10	500	932	600	1112	45	81	96	730-760	1346-1400	730-760	1346-1400	0.5	4
Tissue*2	7-10	500	932	600	1112	45	81	96	720-750	1328-1382	720-750	1328-1382	1	4
Self Glaze*2	5	500	932	-	-	45	81	0	-	-	710-740	1310-1364	-	4
CERABIEN™ ZR FC Paste Stain	5	500	932	600	1112	45	81	96	730	1346	730	1346	1	4

*1 96 kPa = 72 cmHg (29 inchesHg)

*2 The lower baking limit is based on the assumption of a single crown. When baking multiple or large restorations, adjust the dry-out time and temperature according to the upper baking limits.

*3 This is the baking temperature for cases where Liner, Opacious Body, Body, Enamel, Translucent, Luster, Clear Cervical, and Mamelon are additionally applied.

The above program is only a guideline. Baking temperature may be varied with the peculiarities of different furnace. Porcelain furnace temperature variations may be significant in the lower ranges. Determine the exact baking schedule by making a preliminary test before baking an actual case restoration.

COLOURS

CERABIEN™ MiLai line-up and colour combination table

PORCELAINS

ENAMEL SURFACE

	Tx Add high translucency to the enamel surface
	LTx Add high translucency and opalescence to the enamel surface
	LT₀ Add high translucency to the incisal area and the enamel surface
	LT₁ Add standard translucency and opalescence to the enamel surface
	ELT₁ Add brightness to bleached restorations with target shade EW / EWY
	ELT₂ Add brightness to bleached restorations with target shade EW00 / EW0
	LT Super Gray Optimise the incisal area of your middle-aged patients' restorations
	LT Royal Blue Add a strong bluish effect to the incisal area
	Aqua Blue 2 Optimise the incisal area of your young patients' restorations
	LT Coral Add a warm coral-pink effect to enamel, cervical and incisal areas
	Creamy Enamel Add brightness to the enamel surface – mainly on the cusps and ridges of molars

OPACIOUS BODY

	OBXW Control the translucency in the body area of restorations with target shade XW
	OBA₁ Control the translucency in the body area of restorations with target shade A1
	OBA₃ Control the translucency in the body area of restorations with target shade A3
	OBB₁ Control the translucency in the body area of restorations with target shade B1

BODY

	XWB Build up the body area of restorations with target shade XW
	A₁B Build up the body area of restorations with target shade A1
	A₃B Build up the body area of restorations with target shade A3
	B₁B Build up the body area of restorations with target shade B1
	B₃B Build up the body area of restorations with target shade B3
	C₂B Build up the body area of restorations with target shade C2
	D₂B Build up the body area of restorations with target shade D2

CERVICAL EFFECT

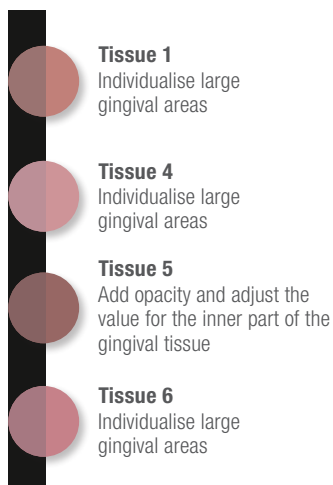
	CCV-1 Individualise the cervical area of brighter shades to reproduce internal play of colours
	CCV-2 Individualise the cervical area
	CCV-3 Individualise the cervical area in cases where the root is exposed or the crown is long

INCISAL DENTIN SURFACE

	E₁ Add translucency to the dentin structure
	E₂ Add translucency to the dentin structure
	Silky E₂ Add translucency to the dentin structure

INTERNAL STAIN

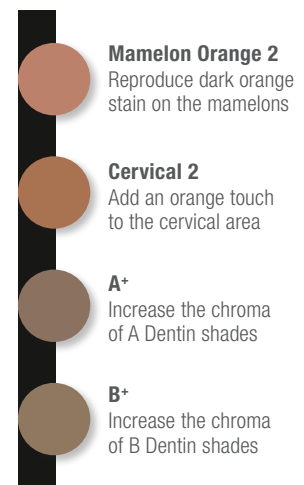
TISSUE



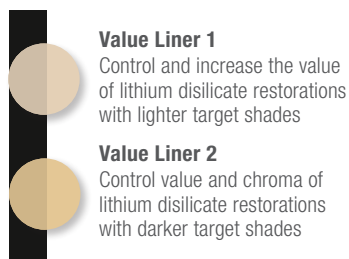
ENAMEL



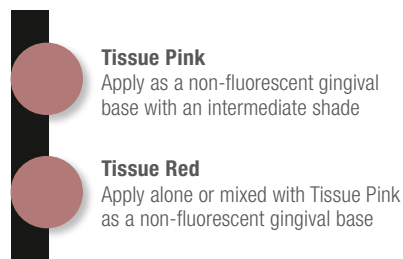
DENTIN



VALUE CONTROL



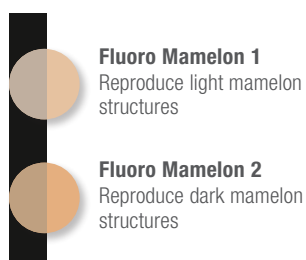
TISSUE



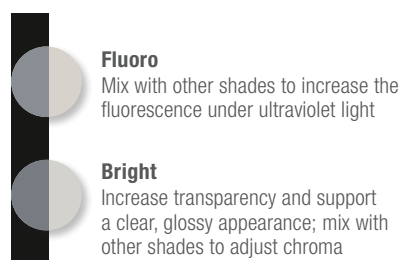
ADJUSTMENT & ENHANCEMENT



MAMELON



TRANSLUCENT EFFECT



PRODUCT LINE-UP

Porcelain							
Liner	10 g, 50 g	Value Liner 1	Value Liner 2				
Opacious Body	10 g, 50 g	XWB	A ₁ B	A ₃ B	B ₁ B	B ₃ B	C ₂ B
		D ₂ B					
Body	10 g, 50 g	OBXW	OBA ₁	OBA ₃	OBB ₁		
Enamel	10 g, 50 g	E ₁	E ₂	Silky E ₂			
Translucent	10 g, 50 g	Tx					
Luster	10 g, 50 g	LTx	LT ₀	LT ₁	ELT ₁	ELT ₂	LT Super Gray
		LT Royal Blue	Aqua Blue 2	LT Coral	Creamy Enamel		
Clear Cervical	10 g, 50 g	CCV-1	CCV-2	CCV-3			
Mamelon	10 g, 50 g	Fluoro Mamelon 1	Fluoro Mamelon 2				
Tissue	10 g, 50 g	Tissue 1	Tissue 4	Tissue 5	Tissue 6		
Internal Stain							
Internal Stain	3 g	White	Gray	Incisal Blue 1	Incisal Blue 2	Blue	Yellow
		Mamelon Orange 2	Cervical 2	Salmon Pink	Tissue Pink	Tissue Red	A ⁺
		B ⁺	Fluoro	Bright			

Liquid	
LF LIQUID	100 ml
IS LIQUID	10 ml / 100 ml



PREDICTABILITY

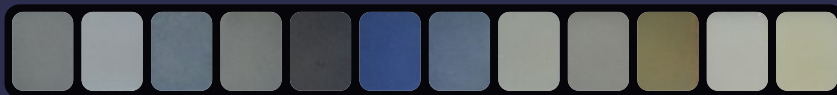
UNIQUE PORCELAIN PROPERTIES

CERABIEN™ MiLai, like all other porcelains from Kuraray Noritake Dental Inc., is based on synthetic feldspathic porcelain technology developed by Noritake Dental Supply Co., Limited in the late 1980s. Its material structure and particle distribution resemble those of natural teeth. Multiple firings are possible without affecting the material's properties. Because of this quality, dental professionals can rely on persistent handling properties and predictable results every time.

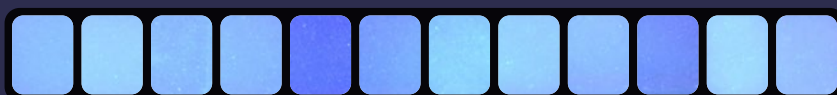
FLUORESCENCE

CERABIEN™ MiLai porcelain is fluorescent, mimicking the optical properties of a natural tooth. This adds to the vitality and life-like appearance of a restoration. Tissue shades do not have fluorescent properties, as natural gingiva does not fluoresce.

DAYLIGHT CONDITION



UNDER ULTRA-VIOLET LIGHT



Tissue shades

Image of the CERABIEN™ MiLai Micro-Layering Kit shades in daylight condition and under ultra-violet light.

A SOLID FOUNDATION

KATANA™ Zirconia MULTI-LAYERED SERIES

Every predictable restoration starts with a solid framework. The KATANA™ Zirconia Multi-Layered Series provides an outstanding foundation for micro-layering with CERABIEN™ MiLai, combining strength, aesthetics and long-term durability. All materials from the KATANA™ Zirconia Multi-Layered Series complement micro-layering with CERABIEN™ MiLai porcelains and internal stains offering a strong, aesthetic and enduring base. They are available with colour gradation and uniform translucency and flexural strength of various levels (KATANA™ Zirconia UTML, STML and HTML PLUS) or with colour, translucency and flexural strength gradation (KATANA™ Zirconia YML).



*Measurement condition: Evaluated by base material (white colour)

1 According to ISO 6872: 2015, Sample size: 3 x 4 x 40 mm, 2 All light transmittance, illuminant: D65, Thickness of sample: 1.0 mm

**Translucency and strength vary depending on layers.

Data source: Kuraray Noritake Dental Inc.

A COMPLETE SYSTEM

DESIGNED TO WORK TOGETHER

Individual products may solve individual challenges. Integrated systems create predictable outcomes.

CERABIEN™ MiLai is part of a complete restorative workflow from restoration fabrication to final cementation. Together with our trusted materials for zirconia, finishing, surface pretreatment and adhesive cementation, it helps create a streamlined, predictable process designed to deliver aesthetic, durable results.



Every step supported by Kuraray Noritake Dental Inc.

PRODUCT ASSORTMENT



CERABIEN™ MiLai PORCELAIN 10 g

109-0191EU Value Liner 1
 109-0201EU Value Liner 2
 109-0051EU Tx
 109-2011EU OBXW
 109-2021EU OBA₁
 109-2031EU OBA₃
 109-2041EU OBB₁
 109-2051EU XWB
 109-2061EU A₁B
 109-2071EU A₃B
 109-2081EU B₁B
 109-2091EU B₃B
 109-2101EU C₂B
 109-2111EU D₂B
 109-2121EU E₁
 109-0131EU E₂
 109-2131EU SILKY E₂
 109-2141EU CCV-1
 109-0141EU CCV-2
 109-2151EU CCV-3
 109-2161EU Fluoro Mamelon 1
 109-2171EU Fluoro Mamelon 2
 109-0071EU LTx
 109-2181EU LT₀
 109-0081EU LT₁
 109-0061EU ELT₁
 109-2191EU ELT₂
 109-2201EU LT Coral
 109-0091EU LT Super Gray
 109-0101EU LT Royal Blue
 109-0111EU Aqua Blue 2
 109-0121EU Creamy Enamel
 109-0151EU Tissue 1
 109-0161EU Tissue 4
 109-0171EU Tissue 5
 109-0181EU Tissue 6



CERABIEN™ MiLai PORCELAIN 50 g

109-0352EU Value Liner 1
 109-0362EU Value Liner 2
 109-0212EU Tx
 109-2212EU OBXW
 109-2222EU OBA₁
 109-2232EU OBA₃
 109-2242EU OBB₁
 109-2252EU XWB
 109-2262EU A₁B
 109-2272EU A₃B
 109-2282EU B₁B
 109-2292EU B₃B
 109-2302EU C₂B
 109-2312EU D₂B
 109-2322EU E₁
 109-0292EU E₂
 109-2332EU SILKY E₂
 109-2342EU CCV-1
 109-0302EU CCV-2
 109-2352EU CCV-3
 109-2362EU Fluoro Mamelon 1
 109-2372EU Fluoro Mamelon 2
 109-0232EU LTx
 109-2382EU LT₀
 109-0242EU LT₁
 109-0222EU ELT₁
 109-2392EU ELT₂
 109-2402EU LT Coral
 109-0252EU LT Super Gray
 109-0262EU LT Royal Blue
 109-0272EU Aqua Blue 2
 109-0282EU Creamy Enamel
 109-0312EU Tissue 1
 109-0322EU Tissue 4
 109-0332EU Tissue 5
 109-0342EU Tissue 6



CERABIEN™ MiLai INTERNAL STAIN 3 g

109-0371EU White
 109-0381EU Gray
 109-0391EU Incisal Blue 1
 109-0401EU Incisal Blue 2
 109-0411EU Blue
 109-0421EU Yellow
 109-0431EU Mamelon Orange 2
 109-0441EU Cervical 2
 109-0451EU Salmon Pink
 109-0461EU Tissue Pink
 109-0471EU Tissue Red
 109-0481EU A⁺
 109-0491EU B⁺
 109-0501EU Fluoro
 109-0511EU Bright

KITS



109-0010EU CERABIEN™ MiLai MICRO LAYERING KIT (160 g)

Tx	(10 g)
ELT ₁	(10 g)
LTx	(10 g)
LT ₁	(10 g)
LT Super gray	(10 g)
LT Royal Blue	(10 g)
Aqua Blue 2	(10 g)
Creamy Enamel	(10 g)
E2	(10 g)
CCV-2	(10 g)
Tissue 1	(10 g)
Tissue 4	(10 g)
Tissue 5	(10 g)
Tissue 6	(10 g)
Value Liner 1	(10 g)
Value Liner 2	(10 g)



109-0020EU CERABIEN™ MiLai INTERNAL STAIN KIT (45 g)

White	(3 g)
gray	(3 g)
Incisal Blue 1	(3 g)
Incisal Blue 2	(3 g)
Blue	(3 g)
Yellow	(3 g)
Mamelon Orange 2	(3 g)
Cervical 2	(3 g)
Salmon Pink	(3 g)
Tissue Pink	(3 g)
Tissue Red	(3 g)
A+	(3 g)
B+	(3 g)
Fluoro	(3 g)
Bright	(3 g)
Internal Stain LIQUID	(10 ml)



109-2412EU CERABIEN™ MiLai ADVANCED LAYERING KIT (200 g)

OBXW	(10 g)
OBA ₁	(10 g)
OBA ₃	(10 g)
OBB ₁	(10 g)
XWB	(10 g)
A ₁ B	(10 g)
A ₃ B	(10 g)
B ₁ B	(10 g)
B ₃ B	(10 g)
C ₂ B	(10 g)
D ₂ B	(10 g)
E ₁	(10 g)
SILKY E ₂	(10 g)
CCV-1	(10 g)
CCV-3	(10 g)
Fluoro Mamelon 1	(10 g)
Fluoro Mamelon 2	(10 g)
LT ₀	(10 g)
ELT ₂	(10 g)
LT CORAL	(10 g)



109-2422EU CERABIEN™ MiLai POWDER STARTER KIT (85 g)

CCV-2	(10 g)
Value Liner 2	(10 g)
E ₂	(10 g)
LT ₀	(10 g)
LT ₁	(10 g)
Aqua Blue 2	(10 g)
Creamy Enamel	(10 g)
IS Incisal Blue 1	(3 g)
IS Mamelon Orange 2	(3 g)
IS Cervical 2	(3 g)
IS A+	(3 g)
IS Bright	(3 g)

CERABIEN™ MiLai COLOUR GUIDES

- 211-2639EU 802 MiLai PORCELAIN COLOUR GUIDE
(Liner, Opacious Body, Body, Mamelon, Tissue)
- 211-2649EU 803 MiLai PORCELAIN COLOUR GUIDE
(Enamel, Translucent, Luster, Clear Cervical)
- 211-2599EU INTERNAL STAIN COLOUR GUIDE



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- Before using this product, be sure to read the Instructions for Use supplied with the product.
- The specifications and appearance of the product are subject to change without notice.
- Printed colour can be slightly different from actual colour.

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"TWIST" DIA for Zirconia is manufactured by EVE Ernst Vetter GmbH and distributed by Kuraray Europe GmbH



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Refer to each product label to
identify its relevant notified body



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