

# 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 COMPACT LINE-UP DESIGNED FOR MICRO-LAYERING**  
for a minimized inventory, streamlined decision-making and a simple, efficient and economic finishing procedure
- 2 LOW FIRING TEMPERATURE (740°C / 1,364°F)**  
for compatibility with a broad range of restorative materials including zirconia and lithium disilicate\* and a simplified inventory management
- 3 UNIQUE PORCELAIN PROPERTIES**  
based on synthetic feldspar porcelain for consistent handling and excellent mechanical properties; multiple firing is possible

\*The material should have CTE value within  $10.2-10.5 \times 10^{-6}/K$  (50 – 500 °C)

# SIMPLIFYING PROCEDURES

## COMPACT LINE-UP DESIGNED FOR MICRO-LAYERING

Modern zirconia or lithium disilicate-based restorative materials have a high aesthetic potential, so that a comprehensive reduction and adding of multiple layers of porcelain is usually no longer required. Instead, a monolithic design or small up to 0.5 mm (vestibular) cut-back is performed, and the dental technician may add a thin layer of porcelain to obtain the effects typical for natural enamel. This procedure is referred to as MICRO-LAYERING – a simplified layering approach leading to beautiful outcomes.



## 16 PORCELAINS

The line-up of CERABIEN™ MiLai has been designed to fulfill the needs of dental technicians preferring this simplified, efficient and economic finishing approach. It consists of 16 porcelains and 15 internal stains easy to select and manage. For additional shade effects, a mixing of the porcelains is possible\*.

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





# PLENTY OF CHOICES

# 740 °C

LOW FIRING TEMPERATURE

The firing temperature of CERABIEN™ MiLai porcelains and internal stains is lower than that of CERABIEN™ ZR porcelains (**740 °C / 1,364 °F versus 930 °C / 1,706 °F**). This feature makes CERABIEN™ MiLai the go-to solution for the finishing of oxide ceramic (e.g. zirconia) and silicate ceramic\* (e.g. lithium disilicate) restorations. With fewer lines of porcelain needed, the porcelain inventory is reduced further and fewer decisions need to be taken.

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



## BAKING SCHEDULE

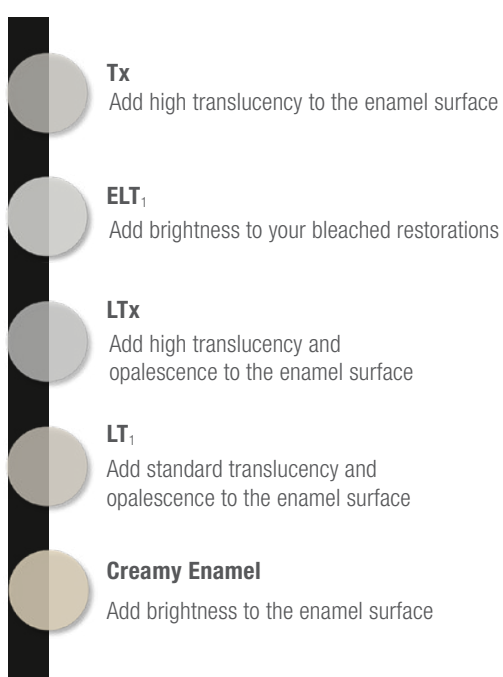
|                                                           | DRY-OUT TIME | PREDRYING TEMPERATURE |     | START VACUUM |       | HEAT RATE |         | VACUUM LEVEL | RELEASE VACUUM |       | HIGH TEMPERATURE |       | HOLD TIME IN THE AIR | COOL TIME |
|-----------------------------------------------------------|--------------|-----------------------|-----|--------------|-------|-----------|---------|--------------|----------------|-------|------------------|-------|----------------------|-----------|
|                                                           | min.         | °C                    | °F  | °C           | °F    | °C/min.   | °F/min. | kPa          | °C             | °F    | °C               | °F    | min.                 | min.      |
| Wash Bake                                                 | 5            | 500                   | 932 | 600          | 1,112 | 45        | 81      | 96           | 740            | 1,364 | 740              | 1,364 | 1                    | 4         |
| Internal Stain                                            | 5            | 500                   | 932 | -            | -     | 45        | 81      | 0            | -              | -     | 700              | 1,292 | -                    | 4         |
| Liner/Enamel/<br>Translucent/<br>Luster/Clear<br>Cervical | 7            | 500                   | 932 | 600          | 1,112 | 45        | 81      | 96           | 740            | 1,364 | 740              | 1,364 | 1                    | 4         |
| Minor Adjustment                                          | 5            | 500                   | 932 | 600          | 1,112 | 45        | 81      | 96           | 730            | 1,346 | 730              | 1,346 | 0.5                  | 4         |
| Tissue                                                    | 5            | 500                   | 932 | 600          | 1,112 | 45        | 81      | 96           | 720            | 1,328 | 720              | 1,328 | 1                    | 4         |
| Self Glaze                                                | 5            | 500                   | 932 | -            | -     | 45        | 81      | 0            | -              | -     | 710              | 1,310 | -                    | 4         |
| CERABIEN™ ZR<br>FC Paste Stain                            | 5            | 500                   | 932 | 600          | 1,112 | 45        | 81      | 96           | 730            | 1,346 | 730              | 1,346 | 1                    | 4         |

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

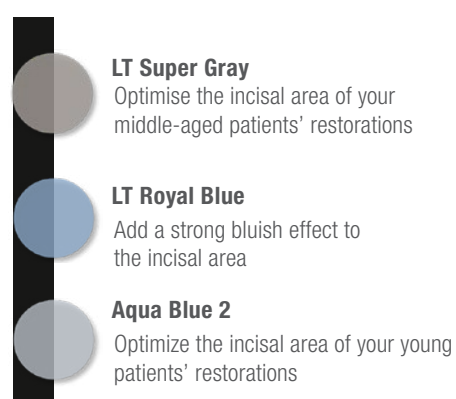
CERABIEN™ MiLai line-up and colour combination table

## ENAMEL SURFACE

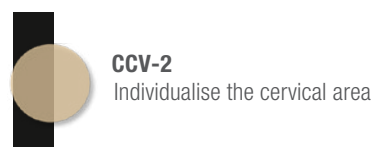


## ENAMEL STRUCTURE

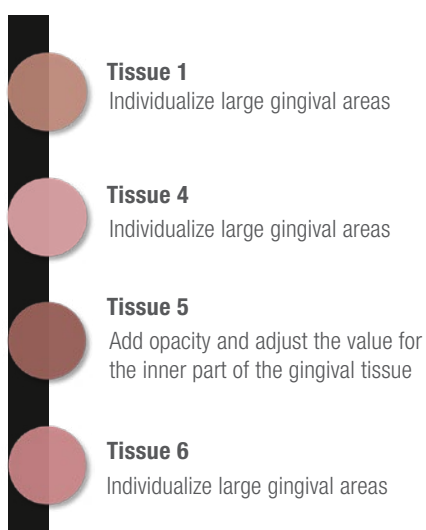
### INCISAL EFFECT



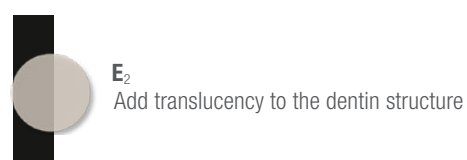
### CERVICAL EFFECT



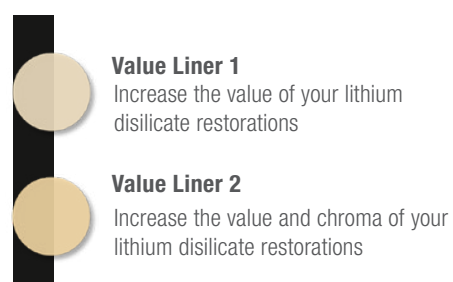
## TISSUE



## INCISAL DENTIN SURFACE



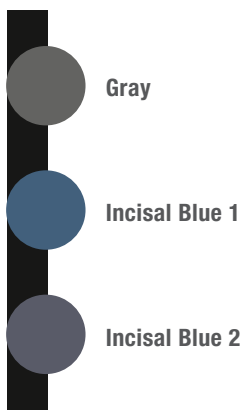
## VALUE CONTROL



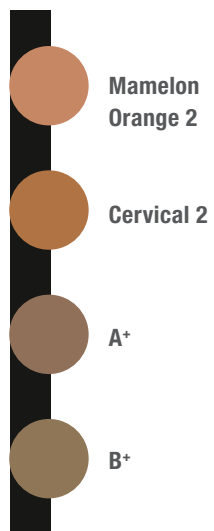


# INTERNAL STAIN

## ENAMEL



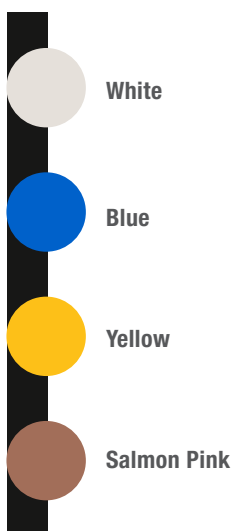
## DENTIN



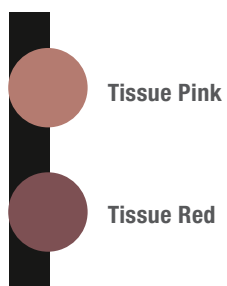
## TRANSLUCENT EFFECT



## ADJUSTMENT & ENHANCEMENT



## TISSUE



# 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 firing is possible without affecting the material's properties. Because of this quality, dental professionals can rely on persistent handling properties and predictable results every time.

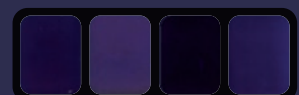
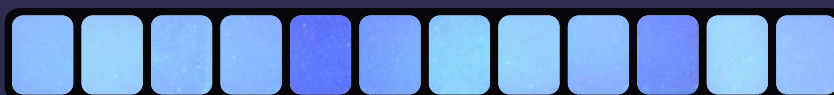
## FLUORESCENCE

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. Only Tissue shades do not have the same fluorescent properties, as natural gingiva is not fluorescent.

DAYLIGHT CONDITION



UNDER ULTRA VIOLET LIGHT



Tissue shades

# A SOLID FOUNDATION

## KATANA™ Zirconia MULTI-LAYERED SERIES

Looking for a base material from the same manufacturer? 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).



UTML

**Ultra Translucent  
Multi-Layered**

Translucency\* 51 %  
Strength\* 557 MPa



STML

**Super Translucent  
Multi-Layered**

Translucency\* 49 %  
Strength\* 748 MPa



HTML PLUS

**High Translucent  
Multi-Layered**

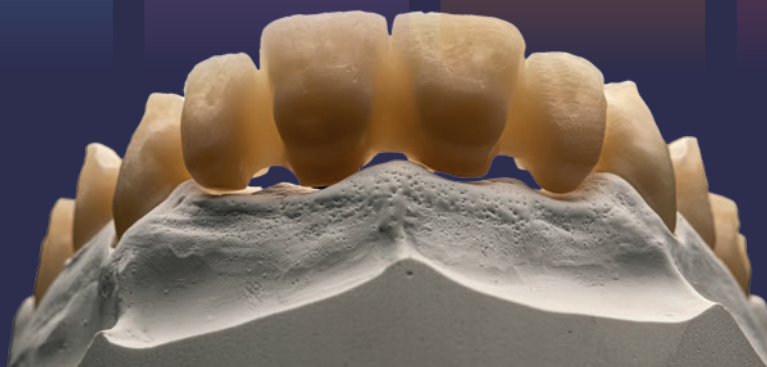
Translucency\* 45 %  
Strength\* 1150 MPa



YML

**Yttria  
Multi-Layered**

Translucency\* 45-49 %\*\*  
Strength\* 750-1100 MPa\*\*



\*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.

# PRODUCT ASSORTMENT



## CERABIEN™ MiLai PORCELAIN 10g

109-0051EU Tx  
 109-0061EU ELT<sub>1</sub>  
 109-0071EU LTx  
 109-0081EU LT<sub>1</sub>  
 109-0091EU LT Super Gray  
 109-0101EU LT Royal Blue  
 109-0111EU Aqua Blue 2  
 109-0121EU Creamy Enamel  
 109-0131EU E<sub>2</sub>  
 109-0141EU CCV-2  
 109-0151EU Tissue 1  
 109-0161EU Tissue 4  
 109-0171EU Tissue 5  
 109-0181EU Tissue 6  
 109-0191EU Value Liner 1  
 109-0201EU Value Liner 2



## CERABIEN™ MiLai PORCELAIN 50g

109-0212EU Tx  
 109-0222EU ELT<sub>1</sub>  
 109-0232EU LTx  
 109-0242EU LT<sub>1</sub>  
 109-0252EU LT Super Gray  
 109-0262EU LT Royal Blue  
 109-0272EU Aqua Blue 2  
 109-0282EU Creamy Enamel  
 109-0292EU E<sub>2</sub>  
 109-0302EU CCV-2  
 109-0312EU Tissue 1  
 109-0322EU Tissue 4  
 109-0332EU Tissue 5  
 109-0342EU Tissue 6  
 109-0352EU Value Liner 1  
 109-0362EU Value Liner 2



## CERABIEN™ MiLai INTERNAL STAIN 3g

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<sup>+</sup>  
 109-0491EU B<sup>+</sup>  
 109-0511EU Fluoro  
 109-0501EU Bright

211-2599EU CERABIEN™ MiLai INTERNAL STAIN COLOR GUIDE

## CERABIEN™ MiLai KITS



109-0010EU  
 CERABIEN™ MiLai MICRO-LAYERING KIT



109-0020EU  
 CERABIEN™ MiLai INTERNAL STAIN KIT



EU Importer  
**Kuraray Europe GmbH**  
 Philipp-Reis-Strasse 4,  
 65795 Hattersheim am Main, Germany  
 Phone +49 (0)69 305 35 835  
 Fax +49 (0)69 305 98 35 835  
[www.kuraraynoritake.eu](http://www.kuraraynoritake.eu)  
[centralmarketing@kuraray.com](mailto:centralmarketing@kuraray.com)

- 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 color can be slightly different from actual colour.

"KATANA" and "CERABIEN" are registered trademarks or trademarks of NORITAKE CO., LIMITED.



**Kuraray Noritake Dental Inc.**  
 300 Higashiyama, Miyoshi-cho, Miyoshi, Aichi 470-0293, Japan  
 PD59-01 1/2022

