



UTML (Ultra Translucent Multi Layered)

ENGLISH INSTRUCTIONS FOR USE

I. Introduction

This IFU is for KATANA Zirconia UTML (Ultra Translucent Multi Layered). KATANA Zirconia UTML is a pre-sintered zirconia disc 98.5 mm in diameter, which contains a plastic ring. This is designed for all milling systems using this generic-type disc. (Please refer to your milling system's technical instructions for correct machine operation.) KATANA Zirconia UTML has 2 available thicknesses: (14mm and 18mm) and has 20 shade variations: (A1, A2, A3, A3.5, A4, B1, B2, B3, C1, C2, C3, C4, D2, D3, D4, EA1, EA2, EA3, ENW). KATANA Zirconia UTML consists of 4 graded shade layers. KATANA Zirconia UTML is recommended for use in fabricating FCZ (Full Contour Zirconia) restorations or the frameworks.

II. Intended Use
KATANA Zirconia is used for the fabrication of the all-ceramic restorations (frameworks, FCZ crowns, FCZ bridges, inlays, onlays and veneers).

III. Sintering Program

Sintering program 1

Temperature	Programming Rate	Holding Time
Room Temp. – 1550°C (2822°F)	10°C/min. (18°F/min.)	—
1550°C (2822°F)	—	2 hrs
1550°C (2822°F) – Room Temp.	-10°C/min. (-18°F/min.)	—

Sintering program 2

Temperature	Programming Rate	Holding Time
Room Temp. – 1400°C (2552°F)	50°C/min. (90°F/min.)	—
1400°C (2552°F) – 1500°C (2732°F)	4°C/min. (7°F/min.)	—
1500°C (2732°F) – 1560°C (2840°F)	10°C/min. (18°F/min.)	—
1560°C (2840°F)	—	16 min
1560°C (2840°F) – Room Temp. (*)	-50°C/min. (-90°F/min.)	—

* The restorations may be removed at 800°C (1472°F) or less depending on the circumstances.

Sintering program 3

Temperature	Programming Rate	Holding Time
Room Temp. – 1450°C (2642°F)	120°C/min. (216°F/min.)	—
1450°C (2642°F) – 1600°C (2912°F)	10°C/min. (18°F/min.)	—
1600°C (2912°F)	—	20 min
1600°C (2912°F) – Room Temp. (*)	-120°C/min. (-216°F/min.)	—

* The restorations may be removed at 800°C (1472°F) or less depending on the circumstances.

IV. Composition

ZrO₂, Y₂O₃ etc.

V. Type and Class (ISO6872:2015)

Type/II/ Class:3

VI. Physical Properties

Coefficient of Thermal Expansion (25-500°C (77-932°F)): 9.7x10⁻⁶/K

VII. Directions for Use

- (1) Take the disc from the packaging and confirm that the disc does not have a crack or other damage.
- (2) Place the disc into the milling machine; then begin the milling process following the milling systems technical instructions.
- (3) After milling, remove the restorations from the disc with a diamond bur, etc.
- (4) The cutting waste or dust, which is attached to the restorations, can be removed with a gentle air stream.

ESPAÑOL MODO DE EMPLEO

I. Introducción

Estas son las instrucciones de uso de KATANA Zirconia UTML (Ultra Translucent Multi Layered). KATANA Zirconia UTML es un disco de zirconia presinterizado, de 98.5 mm de diámetro que contiene un anillo de plástico. Está diseñado para todos los sistemas de fresado que usen este disco genérico. (Consulte en las instrucciones técnicas de su sistema de fresado el funcionamiento correcto de la máquina). KATANA Zirconia UTML está disponible en 2 espesores: (14 mm y 18 mm) y cuenta con 20 tonalidades: (A1, A2, A3, A3.5, A4, B1, B2, B3, C1, C2, C3, C4, D2, D3, D4, EA1, EA2, EA3, ENW). KATANA Zirconia UTML consta de 4 capas de tonalidades graduadas. KATANA Zirconia UTML está recomendado para su uso durante la fabricación de restauraciones de FCZ (Full Contour Zirconia) o estructuras.

II. Uso previsto

KATANA Zirconia se utiliza para fabricar las restauraciones de cerámica completa (estructuras, coronas FCZ, puentes FCZ, inlays, onlays y carillas).

III. Programa de sinterización

Programa de sinterización 1

Temperatura	Tasa de programación	Tiempo de mantenimiento
Temperatura ambiente – 1550°C (2822°F)	10°C/min. (18°F/min.)	—
1550°C (2822°F)	—	2 h
1550°C (2822°F) – Temperatura ambiente	-10°C/min. (-18°F/min.)	—

Programa de sinterización 2

* Las restauraciones se pueden retirar a 800°C (1472°F) o menos dependiendo de las circunstancias.

Programa de sinterización 3

Temperatura	Tasa de programación	Tiempo de mantenimiento
Temperatura ambiente – 1450°C (2642°F)	120°C/min. (216°F/min.)	—
1450°C (2642°F) – 1600°C (2912°F)	10°C/min. (18°F/min.)	—
1600°C (2912°F)	—	20 min
1600°C (2912°F) – Temperatura ambiente (*)	-120°C/min. (-216°F/min.)	—

* Las restauraciones se pueden retirar a 800°C (1472°F) o menos dependiendo de las circunstancias.

IV. Composición

ZrO₂, Y₂O₃ etc.

V. Tipo y clase (ISO6872:2015)

Tipo/II/ Clase:3

VI. Propiedades físicas

Coefficiente de expansión térmica (25-500 °C (77-932 °F)): 9.7x10⁻⁶/K

VII. Instrucciones de uso

- (1) Saque el disco del embalaje y verifique que el disco no presenta grietas ni otros daños.
- (2) Coloque el disco en la fresadora; después inicie el proceso de fresado siguiendo las instrucciones técnicas del sistema de fresado.

10. The margins should be prepared with a deep chamfer and rounded shoulders, with cutting edges and corners rounded to eliminate sharp preparation corners. The angle of the axial surface should be within the range of 5 to 15 degrees.

11. When preparing teeth, avoid the following: deep shoulders, J-margins, knife edges, serrated margins, non-tapered abutments, undercuts, guide grooves, the formation of retentive holes, and sharp corners.

12. Keep the following thickness of this product for fabricating prosthetics:

Location & indication	Wall thickness
Anterior crown or bridge	0.8 mm or more
Veneer	0.4 mm or more*
Posterior crown or bridge	1.0 mm or more
Inlay or onlay	1.0 mm or more

* 0.4 mm or more of this product is for full zirconia veneers. Keep thickness 0.8 mm or more, if it is used for combination with the porcelain.

13. Use the following cross-sectional areas for connectors when fabricating bridges:

Location & indication	Connector cross section
Anterior 2- or 3-unit bridges	12 mm ² or more
Premolar 2- or 3-unit bridges	16 mm ² or more

14. Choose a shade color that is brighter than the intended color for a thick restoration, as it may look duller depending on the thickness of the restoration.

15. When using a sintering furnace for the first time and changing a sintering condition, colors after sintering may vary. Sinter a small piece of Zirconia beforehand and confirm the color.

Cautions on Handling

Contraindications:

1. If the patient is hypersensitive to zirconia or any other components, this product must not be used.
2. Do not use this product to make 4+ unit bridges, cantilever bridges or bridges containing molars.

Warning:

- If the patient or the dental professional demonstrates a hypersensitivity reaction, such as rash, dermatitis etc., discontinue use of the product and seek medical attention immediately.

Caution:

1. This product should not be used when malocclusion, clenching or bruxism conditions are present.
2. When milling the disc or cutting, grinding and polishing the restorations, use an approved dust mask and vacuum with air filter to protect your lungs from inhaling dust.
3. When milling the disc or cutting, grinding and polishing the restorations, use safety glasses to prevent dust from getting into your eyes. If the dust gets into your eyes, immediately rinse with copious amounts of water and consult a physician.
4. Do not use for any purposes except for dental restoration. This product is for dental application only.
5. Do not touch the items heated in the furnace with your bare hands.
6. Do not take the restorations out of the sintering furnace during high temperature, as the quenching causes the breaking. However, if an automatic opening type furnace is used under the sintering program 2 or 3, the restorations may be removed from the furnace at 800°C (1472°F) or less.
7. When milling the disc, use caution when approaching the milling bur with the plastic ring to prevent detachment of the disc. Mill the disc as if leaving a zirconia part contacting the internal side of the plastic ring at 2 mm.
8. Cut and remove the plastic ring prior to sintering the whole disc.
9. Dispose of this product as a medical waste to prevent infection.

Storage:

1. Store in a cool and dry place. Keep away from direct sunlight.
2. The product should be stored at 10-30°C (50-86°F).
3. Do not remove the disc from its packaging during storage.
4. The disc is fragile, and requires care when handling.
5. The product must be stored in an appropriate place where only dental personnel have access.
6. The product must be used by the expiration date indicated on the package.

[WARRANTY]

Kuray Noritake Dental Inc. will replace any product that is proven to be defective. Kuray Noritake Dental Inc. does not 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]

If a serious accident attributable to this product occurs, report it to the manufacturer's authorized representative shown below and the regulatory authorities of the country in which the user/patient resides.

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[MD] Medical Device

FRANÇAIS MODE D'EMPLOI

I. Introduction

Ce mode d'emploi est pour KATANA Zirconia UTML (Ultra Translucent Multi Layered). KATANA Zirconia UTML est un disque préfertié de zirconie de 98.5 mm de diamètre, qui contient un disque en matière plastique. Il est conçu pour tous les systèmes de fraisage utilisant ce disque de type générique. (Veuillez vous référer aux instructions techniques du système de fraisage pour l'utiliser correctement.) KATANA Zirconia UTML possède 2 épaisseurs différentes: (14 mm et 18 mm) et 20 variations de teinte: (A1, A2, A3, A3.5, A4, B1, B2, B3, C1, C2, C3, C4, D2, D3, D4, EA1, EA2, EA3, ENW). KATANA Zirconia UTML est composé d'un dégradé de 4 couches d'ombre. KATANA Zirconia UTML est recommandé pour la fabrication des restaurations ou d'armatures FCZ (Full Contour Zirconia).

VIII. Remarques sur la manipulation

Contre-indications:

1. Si le patient est hypersensible au zirconium ou à d'autres composants, ce produit ne doit pas être utilisé.
2. N'utilisez pas ce produit pour faire des ponts 4+ dents, des ponts cantilever ou des ponts contenant des molières.

Avertissement:

ITALIANO |ISTRUZIONI PER L'USO

I. Introduzione

Le presenti istruzioni per l'uso si riferiscono al prodotto KATANA Zirconia UTM (Ultra Translucent Multi Layered). KATANA Zirconia UTM è un disco pre-sinterizzato in ossido di zirconio di 98,5 mm di diametro, contenente un anello in plastica e progettato per tutti i sistemi di fresaatura che utilizzano questo tipo di disco generico. (Per un utilizzo corretto della macchina, si prega di fare riferimento alle istruzioni tecniche del proprio sistema di fresaatura.) KATANA Zirconia UTM è disponibile in 2 spessori: (14 mm e 18 mm) e in 20 varianti di tonalità: (A1, A2, A3, A5, A4, B1, B2, B3, C1, C2, C3, C4, D2, D3, D4, EA1, EA2, EA3, ENW). KATANA Zirconia UTM è costituito da 4 strati di tonalità graduali. KATANA Zirconia UTM è raccomandato per la realizzazione di restauri FCZ (Full Contour Zirconia) o di strutture.

II. Uso previsto

KATANA Zirconia si usa per realizzare restauri in ceramica integrale (strutture, corone, FCZ, ponti FCZ, inlay, onlays e faccette).

III. Programma di sinterizzazione

Programma di sinterizzazione 1

Temperatura	Rapporto di programmazione	Tempo di mantenimento
Temperatura ambiente - 1550°C (2822°F)	10°C/min. (18°F/min.)	-
1550°C (2822°F)	-	2 ore
1550°C (2822°F)	-10°C/min. (-18°F/min.)	-
- Temperatura ambiente		

Programma di sinterizzazione 2

Temperatura	Rapporto di programmazione	Tempo di mantenimento
Temperatura ambiente - 1400°C (2522°F)	50°C/min. (90°F/min.)	-
1400°C (2522°F)	-	
1400°C (2522°F)	4°C/min. (7°F/min.)	-
1500°C (2732°F)	-	
1500°C (2732°F)	10°C/min. (18°F/min.)	-
1560°C (2840°F)	-	16 min
1560°C (2840°F)	-50°C/min. (-90°F/min.)	-
- Temperatura ambiente (*)		

* La rimozione del resto è possibile a 800°C (1472°F) o a temperatura inferiore, a seconda delle circostanze.

Programma di sinterizzazione 3

Temperatura	Rapporto di programmazione	Tempo di mantenimento
Temperatura ambiente - 1450°C (2642°F)	120°C/min. (216°F/min.)	-
1450°C (2642°F)	-10°C/min. (18°F/min.)	-
1600°C (2912°F)	-	20 min
1600°C (2912°F)	-120°C/min. (-216°F/min.)	-
- Temperatura ambiente (*)		

* La rimozione del resto è possibile a 800°C (1472°F) o a temperatura inferiore, a seconda delle circostanze.

IV. Composizione

ZrO₃, Y₂O₃ ecc.

V. Tipo e classe (ISO6872:2015)

Tipo: II/Classe 3

VI. Proprietà fisiche

Coefficiente di espansione termica (25-500 °C (77-932 °F)): 9,7x10⁻⁶/K

VII. Istruzioni per l'uso

(1) Togliere il disco dalla confezione e assicurarsi che il disco non presenta crepe o sia in altro modo danneggiato.

(2) Collocare il disco all'interno della fresaatrice; avviare quindi il processo di fresaatura seguendo le istruzioni tecniche del sistema di fresaatura.

DEUTSCH | GEBRAUCHSINFORMATION

I. Einleitung

Diese GA gilt für KATANA Zirconia UTM (Ultra Translucent Multi Layered). KATANA Zirconia UTM ist eine vorgesinterte Zirkonoxid-Scheibe mit einem Durchmesser von 98,5 mm und enthält einen Kunststoffring. Sie ist für alle Fräsesysteme geeignet, die mit diesem Durchmesser arbeiten. (Bitte befolgen Sie die Anweisungen für den korrekten Gerätetrieb in der technischen Anleitung Ihres Frässystems.) KATANA Zirconia UTM ist in 2 Stärken (14 mm und 18 mm) und in 20 Farbvarianten (A1, A2, A3, A5, A4, B1, B2, B3, B4, C1, C2, C3, D2, D3, D4, EA1, EA2, EA3, ENW) erhältlich. KATANA Zirconia UTM setzt sich aus 4 abgestuften Farbschichten zusammen. KATANA Zirconia UTM wird für den Einsatz bei der Herstellung von Restaurierungen aus FCZ (Full Contour Zirconia) oder Gerüsten empfohlen.

II. Bestimmungsgemäßige Verwendung

KATANA Zirconia wird zur Herstellung vollkeramischer Restaurierungen (Gerüste, FCZ-Kronen, FCZ-Brücken, Inlays, Onlays und Veneers) verwendet.

III. Sinterprogramm

Sinterprogramm 1

Temperatur	Programmierungsrate	Haltezeit
Raumtemperatur - 1550°C (2822°F)	10°C/min. (18°F/min.)	-
1550°C (2822°F)	-	2 Stunden
1550°C (2822°F) - Raumtemperatur	-10°C/min. (-18°F/min.)	-

Temperatur	Programmierungsrate	Haltezeit
Raumtemperatur - 1400°C (2522°F)	50°C/min. (90°F/min.)	-
1400°C (2522°F)	-	
1400°C (2522°F)	4°C/min. (7°F/min.)	-
1500°C (2732°F)	-	
1500°C (2732°F)	10°C/min. (18°F/min.)	-
1560°C (2840°F)	-	16 Min
1560°C (2840°F)	-50°C/min. (-90°F/min.)	-
- Raumtemperatur		

* Je nach den Gegebenheiten können die Restaurierungen bei maximal 800°C (1472°F) entnommen werden.

Sinterprogramm 3

Temperatur	Programmierungsrate	Haltezeit
Raumtemperatur - 1450°C (2642°F)	120°C/min. (216°F/min.)	-
1450°C (2642°F)	-10°C/min. (18°F/min.)	-
1600°C (2912°F)	-	20 Min
1600°C (2912°F)	-120°C/min. (-216°F/min.)	-
- Raumtemperatur		

* Je nach den Gegebenheiten können die Restaurierungen bei maximal 800°C (1472°F) entnommen werden.

Sinterprogramm 2

Temperatur	Programmierungsrate	Haltezeit
Raumtemperatur - 1400°C (2522°F)	50°C/min. (90°F/min.)	-
1400°C (2522°F)	-	
1400°C (2522°F)	4°C/min. (7°F/min.)	-
1500°C (2732°F)	-	
1500°C (2732°F)	10°C/min. (18°F/min.)	-
1560°C (2840°F)	-	16 Min
1560°C (2840°F)	-50°C/min. (-90°F/min.)	-
- Raumtemperatur		

* Je nach den Gegebenheiten können die Restaurierungen bei maximal 800°C (1472°F) entnommen werden.

Sinterprogramm 3

Temperatur	Programmierungsrate	Haltezeit
Raumtemperatur - 1450°C (2642°F)	120°C/min. (216°F/min.)	-
1450°C (2642°F)	-10°C/min. (18°F/min.)	-
1600°C (2912°F)	-	20 Min
1600°C (2912°F)	-120°C/min. (-216°F/min.)	-
- Raumtemperatur		

* Je nach den Gegebenheiten können die Restaurierungen bei maximal 800°C (1472°F) entnommen werden.

IV. Zusammensetzung

ZrO₃, Y₂O₃ ecc.

V. Typ und Klasse (ISO6872:2015)

Typ: II/Klasse 3

VI. Physikalische Eigenschaften

Wärmeausdehnungskoeffizient (25-500 °C (77-932 °F)): 9,7x10⁻⁶/K

VII. Gebrauchsanweisungen

- (1) Scheibe aus der Verpackung nehmen und sicherstellen, dass die Scheibe keine Risse oder anderen Schäden aufweist.
- (2) Scheibe in die Fräsmaschine einlegen; dann mit dem Fräsprozess beginnen und dabei für die Frässysteme geltenden technischen Anweisungen befolgen.
- (3) Nach dem Fräsen die Restaurierungen mit einem Diamantbohrer o.ä. von der Scheibe abnehmen.

(3) Dopo la fresatura, rimuovere dal disco i restauri con una fresa diamantata ecc.
(4) Gli sfidi del taglio o la polvere che rimane attaccata ai restauri si possono rimuovere con un getto d'aria delicato.

(5) Mettere i restauri nell'incassatoreforno e inserirli nel forno di sintetizzazione.

(6) In base alle prestazioni del forno di sintetizzazione utilizzato, ripassare lo schema di sintetizzazione sopra elencato (III. Programma di sintetizzazione) prima di sintetizzare i restauri.

(7) Dopo la sintetizzazione, rifinire i restauri con una fresa diamantata ecc.

(8) Assicurarsi che i restauri non presentino crepe.

(9)-FOZ:
Cottura del glaze: creare una superficie altamente brillante tramite la lucidatura, soprattutto nelle aree di contatto, poi applicare il glaze su tutte le superfici secondo il metodo abituale.

(9)-2 Strutture: modellare la ceramica dentale (CERABIEN ZR o CZR PRESS LF) sulle strutture seguendo le istruzioni tecniche del produttore.

Controllare il coefficiente di espansione termica della porcellana sulle istruzioni tecniche del produttore per verificare la compatibilità.

VIII. Note relative alla manipolazione

Contro-indicazioni:

1. Se il paziente è ipersensibile all'ossido di zirconio o a qualsiasi altro componente, il presente prodotto non deve essere usato.

2. Non usare questo prodotto per realizzare ponti a 4+ elementi, ponti con elementi in estensione o ponti contenenti molari.

Avvertenze:

• Se il paziente o il professionista del settore mostra una reazione di ipersensibilità come eruzione cutanea, dermatite ecc., sospendere l'uso del prodotto e richiedere immediatamente il parere di un medico.

Attenzione:

1. Questo prodotto non va usato in presenza di malocclusione, serramento dentale o bruxismo.