

# Our Materials



Designed  
in USA



[nxmdental.com](http://nxmdental.com)

**nexum**  
DENTAL

**ZirPrime**

**CadPrime**

**PressPrime**

**TempPrime**  
(PMMA)

**WaxPrime**

**PeekPrime**

**HybridPrime**

**FlexPrime**

# INDEX



01

## **ABOUT THE BRAND**

¿What is Nexum dental?

02

## **ZirPrime**

Zirconia discs

03

## **CadPrime**

Lithium Disilicate Blocks

04

## **PressPrime**

Lithium disilicate Glass Ceramics-Press ingots

05

## **TempPrime**

PMMA

06

## **WaxPrime**

Wax discs CAD/CAM

07

## **PeekPrime**

Dental discs of PEEK for CAD/CAM

08

## **HybridPrime**

Nano-ceramic hybrid resin — aesthetic and durable..

09

## **FlexPrime**

Ideal disc for durable and comfortable splints.

The top half of the page features a dark, moody background. In the center, the word "nexum" is written in a bold, lowercase sans-serif font, with the letter "e" highlighted in a vibrant blue. Below it, the word "DENTAL" is written in a smaller, all-caps, spaced-out sans-serif font. To the right, a large, detailed image of a palm plant is visible. In the foreground, the silhouettes of several office chairs and desks are arranged in a row, suggesting a modern dental laboratory or office environment.

# nexum DENTAL

## ABOUT THE BRAND

At Nexum Dental, **we redefine the standard in dental equipment and supplies**, transforming the ordinary into the extraordinary.

Our headquarters combines **technological innovation with an unwavering commitment** to excellence, positioning us as a leader in the premium dental market.

**We are a comprehensive provider of CAD/CAM solutions**, integrating research and development (R&D), production, and sales, backed by a well-established R&D team. We have obtained numerous international certifications, such as CE, FDA, and ISO, **which guarantee the quality and reliability of our products.**

**We specialize in importing and distributing products** designed for dental laboratories and clinics that seek exceptional quality, ease of use, and an innovative approach. Inspired by the need to offer accessible solutions without compromising exclusivity, we provide advanced equipment and after-sales services that make a difference.

Our mission is clear: **to simplify processes, exceed expectations, and elevate the customer experience.** At Nexum Dental, we are driving a new era of technology in the service of dental health.

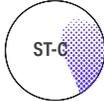
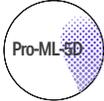
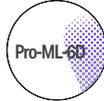
# ZirPrimø

Zirconia Discs



# ZirPrimə

For all indications

	Multilayer	Pre-Shaded	White
ST			
SHT			/
UT		/	/
PRO-ML	 	/	/

## Indications Guides For All Indications

**Note:** The following recommended indication guidelines are for reference only. They may be adjusted according to practical operational needs.

		ST-C-W	ST-ML	ST-C	SHT-ML	SHT-C	UT-ML	5D-Pro	Plus
Veneers		-	-	-	-	-	✓	✗	✗
Inlays/Onlays		-	-	-	-	-	✓	✗	✗
Full contour anterior crown		✗	✗	✗	✓	✓	✗	✓	✓
Anterior coping		✗	✗	✗	✓	✓	✗	✓	✓
Anterior bridge (3 units)		✗	✗	✗	✓	✓	-	✓	✓
Anterior coping bridge (3 units)		✗	✗	✗	✓	✓	-	✓	✓
Anterior bridge (≥4 units)		✗	✗	✗	✓	✓	-	✓	✓
Anterior coping bridge (≥4 units)		✗	✗	✗	✓	✓	-	✓	✓
Full contour posterior crown		✓	✓	✓	✓	✓	-	✓	✓
Posterior coping		✓	✓	✓	✓	✓	-	✓	✓
Posterior bridge (3 units)		✓	✓	✓	✓	✓	-	✓	✓
Reduced posterior bridge (3 units)		✓	✓	✓	✓	✓	-	✓	✓
Posterior bridge (≥4 units)		✓	✓	✓	✓	✓	-	✓	✓
Reduced posterior bridge (≥4 units)		✓	✓	✓	✓	✓	-	✓	✓

# Plus



# 5D-Pro



## Strength

800-1100 Mpa

## Translucency

46%-57%

### 9 shades



## Thickness Options:



## Highlights

### Advanced Hybrid Composition

Engineered through fusion of Japanese TOSOH powder and premium self-developed Nexum powder. 2-in-1, make it easier.

### Outstanding Strength

The product boasts a strength ranging of 800-1100Mpa, providing exceptional durability and stability. It's able to do all indication.

### Fasting Sintering

This model has been proven to meet the characteristics of fast sintering after hundreds of internal tests. The sintering of 1-3 teeth can be fully completed in 2 hours.

### Independent Development

Self-developed fully-combined powder effectively improves the transparency of the product through unique formula and process.

### Aesthetic Gradient

Translucency levels between 46%-57%. Providing a naturally aesthetic gradient appearance for lifelike restorations.

### Perfect Balance

High transparency and high strength are what we pursue. The birth of this product makes fantasy become reality. It is a major revolutionary change in dentistry.

## Strength

800-1350 Mpa

## Translucency

42%-49%

### 20 shades



## Highlights

### 5D Performance

With latest 6 layers overlay and 11 gradient layers, it presents an outstanding 5D effect.

### High Translucency

Translucency levels between 42-49% provide a naturally realistic appearance, making the product inconspicuous in dental restoration.

### Multi-layer Gradient Simulation

Through multi-layer gradient simulation technology, the product successfully replicates the authentic colors of natural teeth, achieving seamless color transition without the need for additional staining.

### Outstanding strength

With a wide strength range of 800-1350MPa, the product ensures excellent durability and reliability.

### Quality Raw Materials

Using materials from a renowned publicly company ensures high quality, stability, and consistency.

### Superior Aesthetic Effects

The product not only excels in aesthetic appearance but also prioritizes strength, providing a comprehensive solution to meet various needs.

# ST-C

## Strength

1200 Mpa

## Translucency

43%



## 20 shades



## Highlights

### Preferred Choice for High-End Long Bridges

As the preferred choice for high-end long bridges, the product offers a strength greater than or equal to 1200MPa and a translucency rate greater than 43%, meeting the high demands of complex restorations for long bridges.

### Premium Raw Materials

Utilizing materials from a reputable publicly company ensures product quality, stability, and consistency.

### Innate Brilliance, Pre-Staining

The product exhibits innate brilliance and utilizes pre-staining technology, eliminating the need for additional coloring. Direct coloration through high-temperature sintering not only preserves the transparency of the product but also simplifies the intricate staining process.

### Rich Color Options

The product offers a rich array of colors, catering to diverse and personalized needs of different patients.

# ST-ML

## Strength

900-1200Mpa

## Translucency

42%-46%



## 20 shades



## Highlights

### Representative of 2D Products, Cost-Effective Champion

As a representative of 2D products, it excels in performance, being hailed as the cost-effective champion.

### Strength Range

900-1200MPa, ensuring outstanding flexural strength for various dental restoration.

### Translucency Range

42%-46%, achieved through pre-staining with multiple layers, providing excellent translucency gradients for a natural appearance.

### Premium Raw Materials

Using materials from a renowned publicly company ensures high quality, stability, and consistency.

### Multi-Layer Pre-Staining

Utilizing multi-layer pre-staining technology, the product exhibits rich color layers without the need for additional coloring, achieving the desired aesthetic results directly.

### Ultra-High Flexural Strength Gradient

Possessing an ultra-high flexural strength gradient, it is suitable for diverse dental restoration needs, including single crowns or three-unit bridges, as well as applications like zirconia bridges with more than 4 units, copying, implant abutments, and full arch.

### Global Sales Exceeding 1 Million Pieces

With global sales surpassing 1 million pieces for products made from the same raw materials, it attests to its success and popularity in the market.

# SHT-C / W

## Strength

1100 Mpa

## Translucency

46%



## 20 shades



## Highlights

### Exceptional Strength

With a strength of 1100MPa, the product ensures outstanding durability and structural stability, suitable for a variety of dental restoration needs.

### High Translucency

Achieving a translucency rate of 46%, the product provides a natural and realistic appearance, closely resembling the color and texture of natural teeth.

### Premium Raw Materials

Utilizing materials from a reputable publicly traded company guarantees the stability and consistency of product quality, laying a reliable foundation for dental restoration.

### Anti-Aging and Strength Performance

Beyond exceptional aesthetic effects, the product also possesses outstanding anti-aging performance and strength, ensuring long-lasting results in oral restorations.

# SHT-ML

## Strength

800-1100Mpa

## Translucency

42%-49%



## 20 shades



## Highlights

### Outstanding Strength

With a wide strength range of 800-1100MPa, the product ensures excellent durability and reliability.

### High Translucency

Translucency levels between 42-49% provide a naturally realistic appearance, making the product inconspicuous in dental restoration.

### Quality Raw Materials

Utilizing materials from a reputable publicly company ensures outstanding stability and consistency.

### Aesthetic Marvel for Anterior Restoration

Particularly suitable for the anterior area, featuring a design with multiple layers for a gentle and natural color gradient, making it a standout product in aesthetic dentistry.

### UT Multi-Layer Technology

The UT multi-layer technology endows the product with excellent translucency and a delicate gloss, showcasing remarkable performance in anterior restoration.

# UT-ML

## Strength

500-650Mpa

## Translucency

46%-49%



## 9 shades



## Highlights

### Exceptional Strength

The product boasts a strength exceeding 650MPa, ensuring high durability and reliability.

### High Translucency

With a transparency rate of 49%, it provides exceptional translucency, presenting a more natural appearance in the oral cavity.

### Premium Raw Materials

Utilizing materials from a reputable publicly company ensures outstanding stability and consistency.

### Aesthetic Marvel for Anterior Restoration

Particularly suitable for the anterior area, featuring a design with multiple layers for a gentle and natural color gradient, making it a standout product in aesthetic dentistry.

### UT Multi-Layer Technology

The UT multi-layer technology endows the product with excellent translucency and a delicate gloss, showcasing remarkable performance in anterior restoration.

# ST-C-W

## Strength

1250Mpa

## Translucency

43%



## Highlights

### Ultra-High Strength

With a strength of 1250MPa, the product ensures outstanding flexural strength, suitable for various high-strength requirements in dental restoration.

### Translucency

A translucency rate of 43% maintains a natural and realistic appearance while providing exceptional strength, making it suitable for a wide range of dental restoration needs.

### Premium Raw Materials

Utilizing materials from a reputable publicly company ensures product quality and possesses ultra-high resistance to aging. Preferred Choice of Common White Zirconia Blanks: It is a top choice for a broad spectrum of dental restoration requirements.

### Versatile Application

The product is not only suitable for traditional single crowns or three-unit bridges but also excels in applications such as zirconia bridges with more than 4 units, copying, implant abutments, and Full Arch.

### Outstanding Anti-Aging Performance

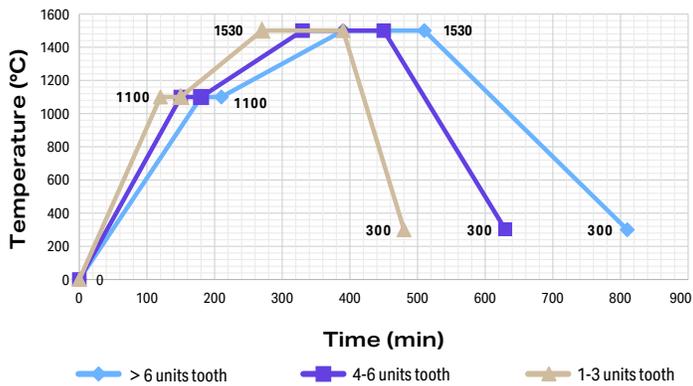
The product exhibits superior resistance to aging, extending the lifespan of dental restorations and providing patients with long-lasting results.



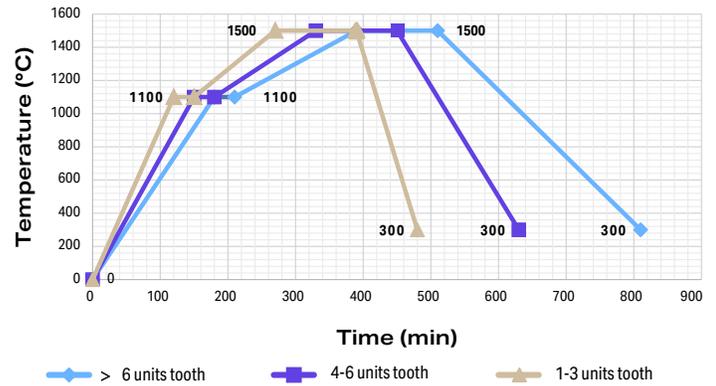
# ZirPrimə

## Zirconia Sintering Programs

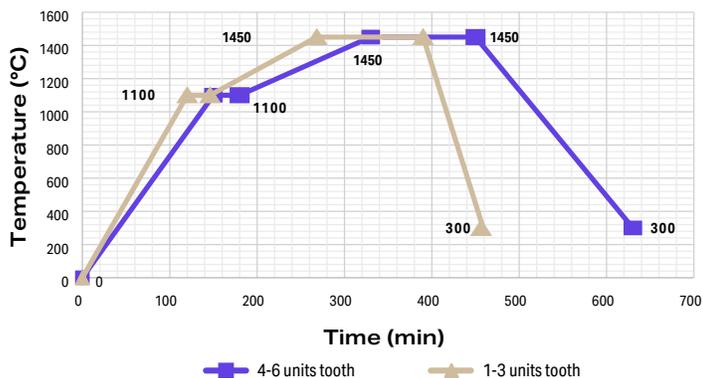
### Recommended Sintering Programs ST-ML/ST-C/ST-C-W



### Recommended Sintering Programs SHT-ML/SHT-C/PRO-ML-5D

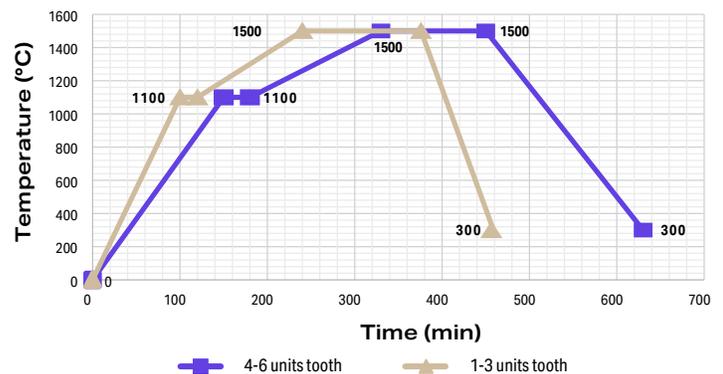


### Recommended Sintering Programs UT



### Recommended Sintering Programs Pro-ML-6D

100% TOSOH



**Remarks:** Recommended Sintering Programs for more detailed sintering programs needed, you can see from IFU. Please feel free to contact us.

# CadPrime

Lithium Disilicate Blocks



# CadPrime

**CadPrime lithium disilicate blocks**, made from superior-quality raw materials and unmatched precision engineering, stand out for their simple and fast crystallization, excellent flexural strength, optimal processability, and exceptional aesthetic effect. **They have become the world's best-selling CAD/CAM dental material for in-office restorations.**



## Unmatched Strength

The average biaxial flexural strength is **637 MPa** after complete crystallization, exceeding the standard strength value established by ISO 6872:2015 for dental ceramic materials. Its superior strength **allows its use in the fabrication of three-unit bridges in the molar area.**

**nexum**  
DENTAL

**637Mpa**

ISO 6872:2015  
Otros materiales

**>300Mpa**

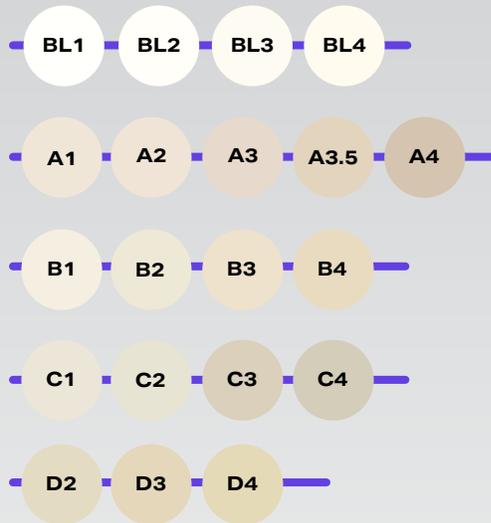
Sistema de flexión biaxial (Mpa)

## Products Highlights

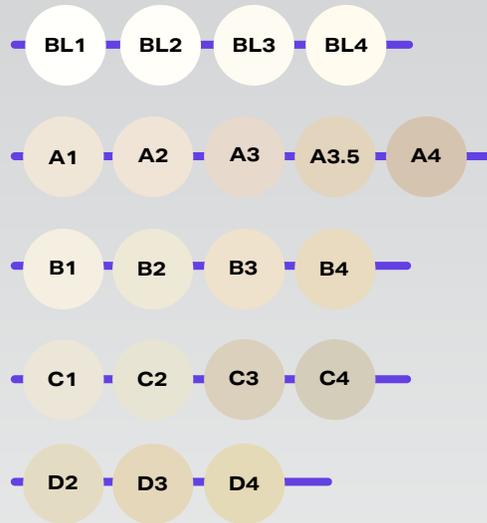
- **Fast and efficient crystallization**, ideal for immediate chairside restorations.
- **Two levels of translucency**, designed to meet the highest aesthetic demands.
- **Superior adhesion**, ensuring reliable clinical durability and exceptional results.
- **Minimal wear on natural teeth**, preserving the integrity of opposing dentition.

# Color

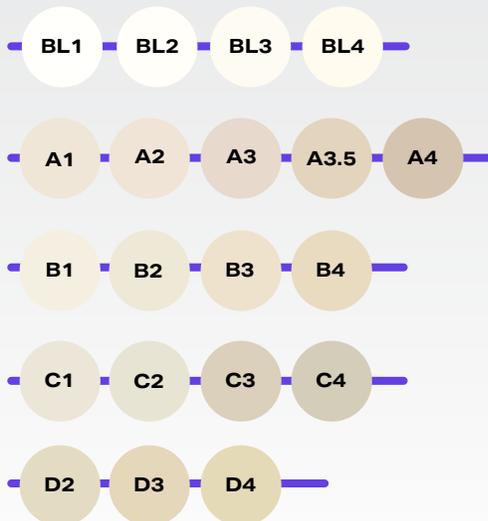
## HT



## LT



## MT



## MO



# Composition

**SiO<sub>2</sub>**

61% - 71%

**Li<sub>2</sub>O**

11% - 17%

**ZrO<sub>2</sub>**

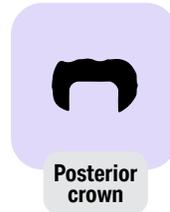
1% - 5%

**Other  
Oxides**

6% - 30%

# Indications

- Veneers
- Inlays
- Coatings
- Single Anterior Crowns
- Single Posterior Crowns
- 3-Unit Bridge \*up to the second Premolar



# Crystallization and Glazing Procedures

Crystallization Curve	
Initial Temperature	400 °C
Drying Time	180 seg
Heating Rate	40 °C/min
Holding Temperature	840°C
Holding Time	7 min
Furnace Opening Temperature	700°C
Vacuum Start	550°C
Vacuum End	840°C

Esmaltado	
Initial Temperature	400 °C
Drying Time	2 min
Drying Rate	60 °C/min
TemperaturE	800°C
Holding Time	2 min
Vacuum Start	550°C
Vacuum End	840°C

Follow our **recommended crystallization** protocol to ensure optimal results and exceptional performance.

## Immediate Restoration in the Clinic



Intraoral Scanner



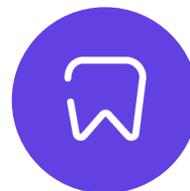
Design



Milling



Sintering



Finalization

# Physical Properties

<b>Density (g/cm<sup>3</sup>)</b>	2.4 - 2.7
<b>Vickers Hardness (MPa)</b>	5400 ± 400
<b>Fracture Toughness (MPa•m<sup>1/2</sup>)</b>	2.55
<b>Thermal Expansion Coefficient (10<sup>-6</sup>K<sup>-1</sup>)</b>	9.8 ± 0.5
<b>Crystallization Temperature (°C)</b>	830 - 840
<b>Chemical Solubility (µg•cm<sup>-2</sup>)</b>	30.3
<b>Chemical Solubility (µg•cm<sup>-2</sup>)</b>	<0.019

# Biological Properties

<b>Cytotoxicity Test</b>	Cytotoxicity Grade: 0
<b>Short-Term Systemic Toxicity (Oral Route)</b>	No systemic toxicity
<b>Sensitization Test</b>	No sensitization
<b>Hemolysis Test</b>	Hemolysis grade <5%
<b>Ames Test</b>	Negative for mutagenesis
<b>Oral Mucosa Irritation Test</b>	No irritation in oral mucosa
<b>Prueba de Toxicidad Sistémica Subcrónica</b>	Subchronic Systemic Toxicity Test



# PressPrime

Lithium disilicate Glass  
Ceramics-Press ingots





## PressPrime

Nexum Press ingots feature excellent translucency, natural color, highly biomimetic, strong compatibility and good adhesion. All-porcelain restorations made after being pressed can show more outstanding natural beauty.

## Indicaciones



## Bending Strength

Its average biaxial bending strength is 460 MPa, higher than the standard strength value, set by ISO 6872:2015 Dentistry–Ceramic materials, and is suitable for single unit anterior or posterior restoration fabrication.





## Physical Properties

Density (g/cm <sup>3</sup> )	2.4–2.6 g/cm <sup>3</sup>
Vickers hardness (MPa)	5400 ± 400 MPa
Fracture toughness (MPa·m <sup>1/2</sup> )	2.55 MPa·m <sup>1/2</sup>
Coefficient of thermal expansion (10 <sup>-6</sup> /K)	9.8 ± 0.5 × 10 <sup>-6</sup> /K
Crystallization temperature (°C)	905–930 °C
Chemical solubility (µg/cm <sup>2</sup> )	30.2 µg/cm <sup>2</sup>
Radioactivity (Bq/g)	<0.019 Bq/g



## Chemical Composition

<b>SiO<sub>2</sub></b> 61% - 71%	<b>Li<sub>2</sub>O</b> 11% - 17%	<b>ZrO<sub>2</sub></b> 1% - 5%	<b>Otros Óxidos</b> 6% - 30%
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## Biological Properties

Cytotoxicity test	Cytotoxicity level 0
Short-term systemic toxicity test (oral route)	No systemic toxicity
Sensitization test	No sensitization
Hemolysis test	Hemolysis rate < 5%
Ames test	Negative for mutagenesis
Oral mucosa irritation test	No oral mucosa irritation
Subchronic systemic toxicity test	Not cause subchronic toxicity

# Color

## Lithium disilicate ingots

Color	Bleach				A					B				C				D		
	BL1	BL2	BL3	BL4	A1	A2	A3	A3.5	A4	B1	B2	B3	B4	C1	C2	C3	C4	D2	D3	D4
HT	✓	✓	✓	✓	✓	✓	✓	✓	✓*	✓	✓	✓	✓*	✓	✓	✓	✓*	✓	✓	✓*
MT	✓	✓	✓	✓	✓	✓	✓	✓	✓*	✓	✓	✓	✓*	✓	✓	✓	✓*	✓	✓	✓*
LT	✓	✓	✓	✓	✓	✓	✓	✓	✓*	✓	✓	✓	✓*	✓	✓	✓	✓*	✓	✓	✓*

Color	Opacidad				
Translucency	M0-0	M0-1	M0-2	M0-3	M0-4
MO	✓	✓	✓	✓	✓

Nota:

- ✓ Para colores disponibles
- ✓\* Para color bajo pedido



**High Strength:**  
Reliable strength,  
chipping resistance.

**Highly Biomimetic**  
A small amount of pigment  
reaction layer, more conven-  
ient operation.

# Advantages

**Natural Color**  
Natural color, excellent  
aesthetic effect.

**Strong Compatibility**  
Suitable for ultra-thin  
veneer, more resistant to  
acid corrosion.



## Press-casting Curve

Transparency	Investment Ring	Starting Temperature	Heating Rate Temperatura	Maximum Temperature	Holding Time	Vacuum-on	Vacuum-off
HT/LT/MT	100g	700 °C	60 °C/min	905 °C	15 min	700 °C	905 °C
MO	100g	700 °C	60 °C/min	910 °C	15 min	700 °C	910 °C
HT/LT/MT	200g	700 °C	60 °C/min	910 °C	25 min	700 °C	910 °C

**Temp**Primə  
(PMMA)



## Monolayer PMMA Disc with nanostructure

TempPrime  
(PMMA)



### Colors

A1 A2 A3 A3.5 A4 B1 B2  
B3 B4 C1 C2 C3 C4 D2  
D3 D4 BL1 BL2 BL3 Clear  
Pink A/B/C White

Properties	Value
Modulus of Elasticity	100 MPa
Density	1.35-1.45 g/cm <sup>3</sup>
Hardness	85-90 (Shore hardness)
Water absorption	<0.04%
Component	PMMA>99% ; Pigment>1%



# Multilayer PMMA Disc with nanostructure



### Colors

A1 / A2 / A3 / A3.5 / A4 /  
B1 / B2 / B3 / C1 / C2

Properties	Value
Density	1.35-1.45g/cm <sup>3</sup>
Hardness	85-90 (Shore hardness)
Water absorption	<0.04%
Modulus of Elasticity	100.00 MPa
Component	PMMA>99%; Pigment <1%



# PMMA CAD/CAM Disc Bilayer



For full dentures



For temporary immediate load  
implant dentures

## Colours

Vita A1 / A2 / A3 / A3.5 / Pink A/B/C

Properties	Value
Modulus of Elasticity	100 MPa
Density	1.35-1.45 g/cm <sup>3</sup>
Hardness	85-90 (Shore Hardness)
Water absorption	<0.04%
Component	PMMA>99%; Pigment <1%

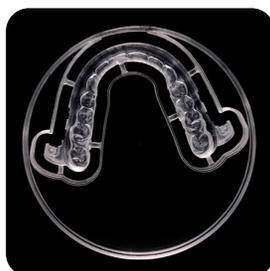


# PMMA Clear Disc



Transparent PMMA disc optimized for CAD/ CAM milling. Its nanostructure ensures optical clarity, stability, and strength—ideal for splints, surgical guides, and mock-ups. Easy to mill and polish, offering a crystal-clear and aesthetic finish in every application.

Properties	Value
Strength	>100 Mpa
Density	1.35-1.45 g/cm <sup>3</sup>
Hardness	85-90 (Durezza Shore)
Water Absorption	<0.04%
Modulus of Elasticity	2500 MPa
Component	PMMA>99%; Pigmento <1%





**WaxPrime**  
CAD/CAM Wax Disc

# WaxPrimə

## CAD/CAM Wax Disc



### Colors

Green / Blue / Beishe / Grey/  
Brown/ White / Atrovirens / Pink

### Size

98 mm / 95 mm / AG92\*97mm

Properties	Value
Hardness	45 - 55 (Hardness shore)
Melting point	116°C
Density	0.89-0.93 g/cm <sup>3</sup>
Sharpability	Excelent
Termal decomposition secure	< 0.30%
Linear expansion	5%



**Peek**Primə



# PeekPrimə

## Dental PEEK CAD/CAM Disc



### Thickness

12mm / 14 mm / 16 mm / 18 mm /  
20 mm / 22 mm / 25 mm / 30 mm

### Colours

White, Natural, Beige, Pink

Properties	Value
Elongation at break	45%
Tensile Strength	98.00 MPa
Cantilever impact	179 KJ/m <sup>2</sup>
Bending Strength	162.00 MPa
Flexural modulus	4.00 MPa
Moisure Absorption	0.00WT%



# HybridPrime

Nano-Ceramic  
Hybrid Resin



# HybridPrimæ

## Resina Híbrida con Nanocerámica



### Especificaciones

98mm, C14

### Grosor

14mm/16mm/18mm/20mm

### Colores

A1,A2,A3,A3.5,B1

Propiedades	Valor
Valor de solubilidad	< 7.5 µg/mm <sup>3</sup>
Dureza	> 30 hv (HV0.2)
Densidad	3.0 g/cm <sup>3</sup>
Tasa de absorción de agua	< 30 µg/mm <sup>3</sup>
Composición	Resina compuesta modificada con acrílico Contenido de carga inorgánica > 60% Contenido de pigmento < 1%



# FlexPrime

Thermoplastic Nylon Disc  
Flexible, Esthetic & Biocompatible

CE 1639

FDA  
APPROVED

Designed in USA

naxum  
DENTAL



FlexPrime

## Disco de resina flexible para CAD/CAM

### Grosor

14 mm / 16 mm / 18mm / 20 mm /  
22 mm / 25 mm / 30 mm

### Colores

A0, A1, A2, A3, A3.5, B1, Transparente, Rosa

Propiedades	<sup>A</sup> Valor
Densidad	1,41 g/cm <sup>3</sup>
Resistencia a la tracción	61.00 MPa
Módulo de tracción	2820,00 MPa
Resistencia a la flexión	90.00 MPa
Módulo de flexión	2620,00 MPa
Absorción de humedad	0.22WT%





Designed  
in USA

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DENTAL



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[www.nxmdental.com](http://www.nxmdental.com)