



DENTAL PORCELAIN POWDER
PRODUCT CATALOGUE

www.zerodent.com.tr





Zerodent takes firm and confident steps forward to its ideal of being a leader in the industry thanks to its import, export, dentist and laboratory consumables production and marketing experience of 11 years in the dental sector.

Our company, speeding up the domestic and international market researches thereof each and every passing day, increases its market share continuously with the ideal of being a leader in its sector.

Our porcelain powder and opaque powder, manufactured by taking aesthetics and durability to the forefront, is produced as the world's strongest mineral powder by virtue of the new generation Nano Grinding Technology.

The material has higher added value compared to its competitors thanks to its excellent color harmony, high chroma, density and 12.9-13.8 thermal expansion coefficient.

Its product range is rather vast with approximately 130 products and has a variety of effects which can respond to all kinds of works with effects.

Our porcelain powder demonstrates excellent performance against cracking and removal by virtue of its high value of MP which it has for sensitive works such as laminate, inlay and onlay applications. The material shows high resistance even in 3micron thickness by virtue of the new generation nanotechnology and doesn't reflect its opaqueness even under intense light by adding a natural depth to short-distance works thanks to the high chromium density thereof.

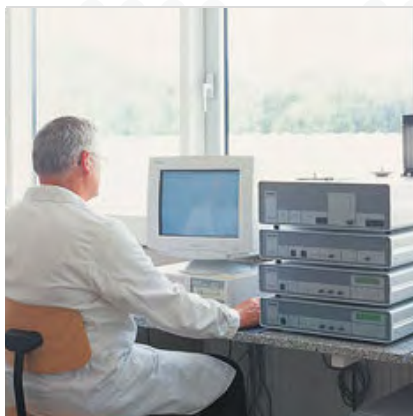
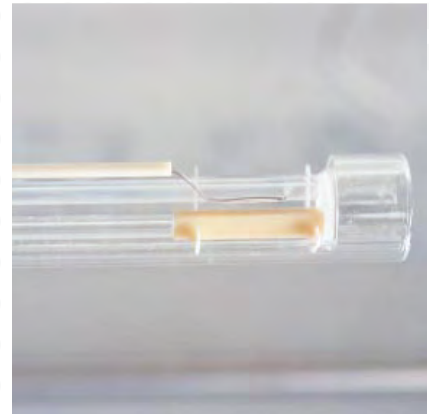
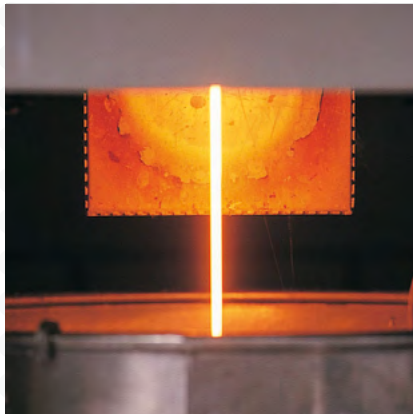
It has a perfect conformity with metals including or not including NICKEL in particular in LASER infrastructure due to the high thermal expansion coefficient thereof.

Our company, aiming to offer innovation, quality and continuous healthy service, takes firm and confident steps in line with its journey.

PRODUCTION

Modern production technologies and quality assurance form the basis and prerequisites for the custom manufacturing of our private label products geared to meet market requirements. We at ZERODENT guarantee you dental ceramics and artificial teeth of the highest quality and greatest possible safety. In this way we can meet the constantly growing market demands and wishes of dental technicians, dentists and patients together.

The cooperation with universities and internationally recognised dental technicians as well as a rigorous quality control system, guarantee the reliability and continuity of the product properties.





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Opaque
Liquid

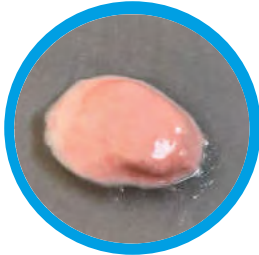
Modelling
Liquid

Glaze
Liquid

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Dentine building up



Mixing

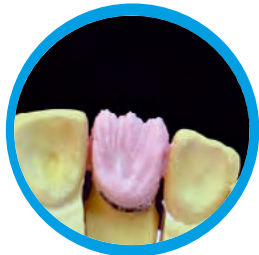
Use Modeling Liquid to mix Dentine powder until it becomes pasty, as shown in the picture.

* Don't make it too dry or too wet.



Building up Dentine

Judge the size of Dentine layer based on space and occlusion. Due to shrinkage effect, normally Dentine layer should be around 10% larger to compensate the firing shrinkage effect.



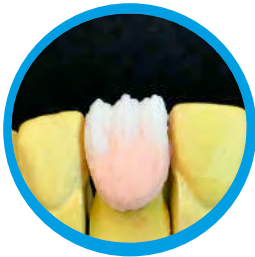
Attention

Cervical shade of natural tooth is darker than Dentine layer. The thickness of Dentine layer should be thinner from the cervical 1/3 to the incisal 1/3 in order to reserve space for Enamel and Transparent layer.

	Initial Temperature	Drying Time	High Temperature	Standby Time In Vacuum	Vacuum Starting	Vacuum Ending	Heat Increase Per Minute
Oxide Firing	According to metal manufacturer's instructions						
1.Dentine Firing	550°C	6 min.	930°C	1 min.	550°C	925°C	53°C
2.Dentine Firing	550°C	5 min.	925°C	1 min.	550°C	920°C	53°C



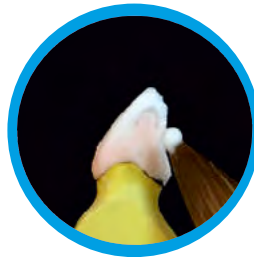
Enamel & Transparent building up



Building up Enamel

Apply Enamel ceramic to the incisal 1/3.

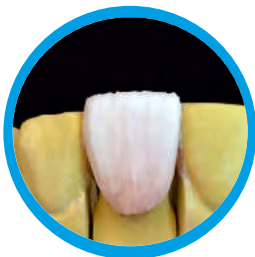
* Use brush to compact and smoothen surface.



Add-on

Add-on Dentine & Transparent to interproximal space if needed

*Use tweezer to pick up crown.



Building up Transparent

Apply Transparent to the incisal 2/3 if needed, covering Enamel. Slight overbuilding is allowed at incisal area.



Firing

Fire referring to the Firing Parameters (See P14)

*Insufficient firing or over firing may lead to unstable crystalline structure and undesired shades.

	Initial Temperature	Drying Time	High Temperature	Standby Time In Vacuum	Vacuum Starting	Vacuum Ending	Heat Increase Per Minute
Oxide Firing	According to metal manufacturer's instructions						
1.Enamel Firing	550°C	6 min.	930°C	1 min.	550°C	925°C	53°C
2.Enamel Firing	550°C	5 min.	925°C	1 min.	550°C	920°C	53°C



Opaque application

Used for covering metal color and differentiating shades.



Mixing

If Opaque is dry, use Opaque Liquid to dilute it and get the optimal condition as shown in the picture.

* Use plastic stick to mix, avoid water or other liquid.

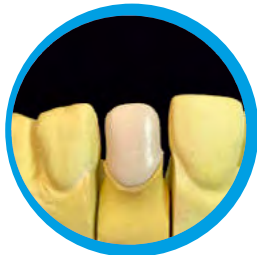


Coating

Use plastic stick to coat Opaque evenly on the surface, covering metal color.

Fire until Opaque layer is baked dry.

* Vibrate metal crown after Opaque coating, to ensure Opaque is well laid on the crown.



Firing

Fire referring to Firing Parameters.

* Preheat metal crown until Opaque layer looks white before firing, to avoid bubbles and cracks.

* Opaque layer should be smooth and metal color should not be seen, otherwise additional Opaque layer shall be applied.

	Initial Temperature	Drying Time	High Temperature	Standby Time In Vacuum	Vacuum Starting	Vacuum Ending	Heat Increase Per Minute
Oxide Firing	According to metal manufacturer's instructions						
1.Opaque Firing	450°C	6 min.	960°C	1 min.	450°C	950°C	60°C
2.Opaque Firing	450°C	5 min.	950°C	1 min.	450°C	940°C	60°C



MC Opaque Dentine Application



Mixing

Mix the powder using modelling liquid until it becomes pasty.



Coating

Apply respecting space and occlusion.



Firing

Fire referring the firing parameters.

	Initial Temperature	Drying Time	High Temperature	Standby Time In Vacuum	Vacuum Starting	Vacuum Ending	Heat Increase Per Minute
Oxide Firing	According to metal manufacturer's instructions						
1.Opaque Dentine Firing	550°C	6 min.	930°C	1 min.	550°C	925°C	53°C
2.Opaque Dentine Firing	550°C	5 min.	925°C	1 min.	550°C	920°C	53°C



Product Specifications

It has a glassy appearance. It has a thermal expansion coefficient (CTE) of 13.8.

The raw material of the product is mineral.

Product Description

It is used in incisal tips in young patients. It is used for the color reflection of contact teeth by making illinois in mesial and distal contacts. In special cases, a thin layer of CLR made by breaking the color with enamel and applied as a vitality enhancer.

Enamel stacking is made on the product. It is recommended to use with Shark dentine liquid.

	Initial Temperature	Drying Time	High Temperature	Standby Time In Vacuum	Vacuum Starting	Vacuum Ending	Heat Increase Per Minute
Oxide Firing	According to metal manufacturer's instructions						
1.Clear Firing	550°C	6 min.	930°C	1 min.	550°C	925°C	53°C
2.Clear Firing	550°C	5 min.	925°C	1 min.	550°C	920°C	53°C



Product Specifications

It is used for polishing the porcelain surfaces. It has a thermal expansion coefficient (CTE) of 12,9-13,8 The raw material of the product is mineral.



A creamy structure is obtained by mixing with Shark glaze liquid and it is applied by brushing with a thin layer. It has a vibrant and bright appearance. It doesn't tarnish and dull in our mouth for many years. It is applied for polishing the finished porcelain.

	Initial Temperature	Drying Time	High Temperature	Standby Time In Vacuum	Vacuum Starting	Vacuum Ending	Heat Increase Per Minute
Oxide Firing	According to metal manufacturer's instructions						
1. Glaze Firing	550°C	6 min.	910°C	1 min.	---	---	65°C
2.Glaze Firing	550°C	5 min.	910°C	1 min.	---	---	65°C



NE Bond

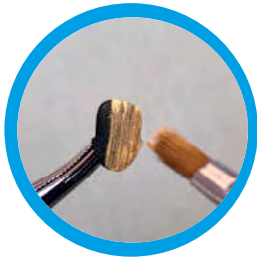
Used for tolerating opaque with any kind of metal



Mixing

If Bond is dry, use Opaque Liquid to get the optimal condition.

* Use plastic stick to mix, avoid mixing with water or other liquid.



Coating

Use flat-end brush to coat a very thin layer of Bond on metal crown before firing.

- * Avoid thick layer on metal crown.
- * Avoid water in the brush.
- * Seal the Bond bottle after use to avoid contamination.



Firing

* Fire Bond referring to the Firing Parameters.

PS: Firing parameters can be changed by the user depending the machine performance

	Initial Temperature	Drying Time	High Temperature	Standby Time In Vacuum	Vacuum Starting	Vacuum Ending	Heat Increase Per Minute
Oxide Firing	According to metal manufacturer's instructions						
NB Bonder Firing	550°C	6 min.	980°C	1 min.	550°C	970°C	80°C
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**Opaque
Liquid**

**Modelling
Liquid**

**Glaze
Liquid**

Product Specifications

Shark opaque liquid is specially designed to support high thermal expansion coefficient (CTE) and ensure full color fit.

Product Description

Suitable for mixing with Shark opaker. Thanks to its smooth surface and high coverage after the mixture, it covers metal even in one layer. It is made available after it becomes clear that it does not cause any disinformation in the porcelain by daily, weekly and monthly tests. It is a specially produced mixing liquid for Shark opaker.



EC CERTIFICATE

Production Quality Assurance

Medical Devices Directive 93/42/EEC Annex V

Company Name : Zerodent Tıbbi Malzeme Sanayi Ticaret Limited Şirketi

Company Address : Murat Çeşme Mah. Oluşum Sk. No:6/1 İç Kapı No:16 Büyükkçekmece
İSTANBUL / TURKEY

Related Directives and Annex : 93/42/EEC Medical Devices Directive - Annex V

Product : Non-Sterile Porcelain Powder (Porcelain Powder For Dental
Zirconia Crown, Porcelain Powder For Dental Metal Crown) - Class IIa

GMDN : 16187

Certificate Number : M.2020.106.13529
Report Number : MD.3860JB
Initial Assessment Date : 31.01.2020
Registration Date : 29.04.2020
Revision Date /No : 24.05.2021/01
Expiry Date : 27.05.2024



UDEM International Certification
Auditing Training Centre Industry
and Trade Inc. Co.

UDEM hereby declares that the requirements of Annex V of the directive 93/42/EEC have been met for the listed product. The above named manufacturer has established and applies a quality assurance system which is subject to periodic surveillance audits, defined by Annex V, section 4 of the aforementioned directive. UDEM's responsibility for class II devices covered by the EC certificate is limited to manufacturing issues related to conforming and maintaining these conditions. If the device is sterile and manufacturing issues related to product's conformity with microbiological requirements, it has no measurement function, this certificate remains the property of UDEM International Certification Auditing Training Centre Industry and Trade Inc. Co. to whom it must be returned upon request. The above named company and UDEM must keep a copy of this certificate for 3 years from the registration of this certificate. In case of the CE mark, it is under the responsibility of the manufacturer with the completion of EC Declaration of Conformity. The above-mentioned company must notify all changes related with the approved product to UDEM. If UDEM will not renew the expiry date of this certificate in question, the mentioned company should stop placing the product on the market. The validity of the certificate can be checked through www.udem.com.tr.

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E-mail: info@udemtr.com.tr www.udem.com.tr



CERTIFICATE

ZERODENT TIBBİ MALZEME SANAYİ VE TİCARET LİMİTED ŞİRKETİ

MURAT ÇEŞME MAH. OLUŞUM SOK. NO:6/1 İÇ KAPI NO:16
BÜYÜKÇEKMECE / İSTANBUL / TÜRKİYE

*Has been assessed and found to Comply with the Requirements of:
Denetlenmiş ve aşağıdaki standardın gerekliliklerine uygunluğu görülmüştür:*

ISO 13485:2016

*Medical Devices-Quality Management System is applicable to:
Tıbbi Cihazlar Kalite Yönetim Sistemi*

**PRODUCTION AND SALES OF ZIRCONIUM POWDER, PORCELAIN
POWDER FOR DENTISTRY**

**DİŞÇİLİKTE KULLANILAN ZIRKONYUM TOZU, PORSELEN TOZU
ÜRETİM VE SATIŞI**

Certificate Number: 2021/MQMS/10212 Initial Certification Date: 07.05.2021
Belge Numarası: 2021/MQMS/10212 İlk Belgelendirme Tarihi: 07.05.2021

Certification Period: 3 Years Certificate Validity Date: 06.05.2022
Belgelendirme Periyodu: 3 Yıl Belge Geçerlilik Tarihi: 06.05.2022





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