

**Alumina Sandblasting of Zirconia Framework Surface**

Create a matt-finish surface by sandblasting with 50 $\mu$ m alumina at 44psi (=0.3MPa) .

**Cleaning of the Zirconia Framework**

Clean the framework in an ultrasonic unit for 5 minutes in an acetone solution to remove residual zirconia dust and other debris.

**First Application and Baking of Shade Base Stain**

The differences between CZR Shade Base Porcelain and CZR PRESS Shade Base Stain

	CZR Shade Base Porcelain	CZR PRESS Shade Base Stain
Baking temperature	1st. 930°C (1,706°F) 2nd. 930°C (1,706°F)	1st. 1090°C (1,994°F) 2nd. 1080°C (1,976°F)
Grain size	25 $\mu$ m	4 $\mu$ m
Build-up thickness	0.2mm	0.15mm
Combination with CZR Porcelain	Good	Good
Combination with CZR PRESS	Not acceptable	Good



Mix the shade base stain with IS liquid



Shade Base Stain Color Guide



Application of the Shade Base Stain

Mix the shade base stain with **IS liquid**. The consistency of the mixture should be like “Maple Syrup”, so that the mixture does not slip down from the framework or puddle at the margins. Apply the mixture evenly and thinly, covering the zirconia framework with 0.15mm thickness, which is slightly thicker than for conventional external stain. Shade Base Stain is a necessary step to produce the basic foundation color. For the first baking of Shade Base Stain, please refer to Baking Schedule.

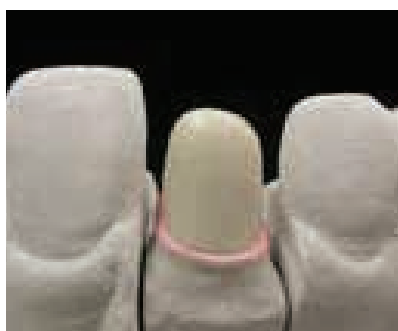
**Note**

IS liquid should never be mixed with water. If mixed, the color will not be clear and the applied mixture will detach from the zirconia framework during drying process.  
The application brush should be cleaned with IS liquid only. Never use water for cleaning.

## Second Application and Baking of Shade Base Stain

Apply the shade base stain mixture again in a thickness of about 0.15 mm. To produce an even color saturation, be sure to perform the second application and baking. For the second baking, refer to the attached 2nd Baking Schedule. Also refer to the attached Shade Base Stain Color Guide for the color shades.

\*If applied too thinly, the shade will be low in chroma. \*If applied too thickly, the shade will be high in chroma.



After baking of the Shade Base Stain



Thin Application of Shade Base Stain



Thick Application of Shade Base Stain

## Baking Schedule

### Baking Schedule for Shade Base Stain

	1 <sup>st</sup> bake		2 <sup>nd</sup> bake	
Dry-Out Time	5min.		5min.	
Low Temperature	700°C	1292°F	700°C	1292°F
Start Vacuum	700°C	1292°F	700°C	1292°F
Heat Rate	65°C/min.	117°F/min.	65°C/min.	117°F/min.
Vacuum Level	96kPa**		96kPa**	
Release Vacuum	1090°C	1994°F	1080°C	1976°F
High Temperature	1090°C	1994°F	1080°C	1976°F
Hold Time (in the air)	1min.		1min.	
Cool Time	4min.		4min.	

\*\*96kPa=72cmHg (29inchesHg)

## ! Remarks on Safety

- Work in a well-ventilated room during mixing and firing investment.
- Investment and ceramic material contains Silica. Avoid inhaling the dust. Use a dust collector and an approved dust mask. Over exposures may cause delayed lung injury.
- Avoid exposure to eyes. Wear the goggles for eye protection during cutting or polishing works. In case of contact with eyes, flush eyes with copious amounts of water and consult an eye-doctor.
- Avoid eye contact with all CZR PRESS liquids. In case of contact with eyes, flush eyes with copious amounts of water and consult an eye-doctor.
- Do not touch items heated by the furnace with your bare hand.
- Keep IS Liquid, ES Liquid and Crack Finder away from flames and high temperatures. They are flammable.
- Ceramic Ingot containers are made of glass. Be careful in handling them.
- Some people are sensitive to skin contact. Wear rubber gloves to protect your skin.
- Avoid ingesting. Keep out of the reach of children.
- This material is for dental application only. Do not use for any purpose not specified in the instruction manual.

### ■ SYMBOLS USED IN A LABEL

SYMBOL	MEANING	SYMBOL	MEANING
	MANUFACTURER		BATCH CODE
	USE BY		CATALOGUE NUMBER
	CONSULT INSTRUCTIONS FOR USE		
	AUTHORISED REPRESENTATIVE IN THE EUROPEAN COMMUNITY		

### • Contraindications

If the patient is hypersensitive to Dental Porcelain or any of the other components, this medical product should not be used. Or it should be only used under the strict supervision of the patient's doctor/dentist.

### • EU Authorized Representative

Name : Kuraray Europe GmbH  
Address : Phillipp-Reis-Str.4 65795 Hattersheim am Main, Germany

*Noritake*

Kuraray Noritake Dental Inc.

300 Higashiyama, Miyoshi-cho, Miyoshi, Aichi 470-0293, Japan

Phone +81-561-32-8953 Fax +81-561-32-8976

<http://www.kuraraynoritake.com>