

# Highest quality plasters for challenging tasks



The basis for any successful restoration

bredent

# Highest quality plasters for challenging tasks

Only selected raw materials which meet the high requirements in the laboratory and facilitate day-to-day work are used to produce bredent plasters.

## Quality objective

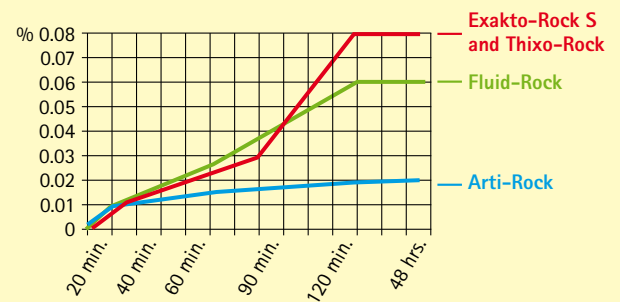
bredent has been developing and producing plasters in Germany for more than ten years, so is able to offer greater reliability in the manufacturing process. High requirements in the laboratory are ensured by the complex in-house controls on each batch produced. This means that each batch receives the same mechanical values, ensuring perfect processing even on challenging tasks.

## Coordinated expansion

The low level of expansion of the plasters, from 0.02% with the articulation plaster **Arti-Rock**, to 0.06% with the low viscosity base plaster **Fluid-Rock** and up to a maximum of 0.08% with the super hard plasters **Exakto-Rock S** and **Thixo-Rock**, makes precise coordination of expansion possible. The expansion stop of the plasters after a maximum of two hours, enabling rapid further processing and ensuring a high accuracy of fit, is unique.

## Products for the perfect model manufacture

Innovative solutions facilitate the perfect model manufacture. Be it the various sizes of base mould with a perfected pin and split cast system or the associated master pin drilling unit or ecovac vacuum mixing device precision devices, bredent offers high quality products for challenging tasks.



ecovac vacuum mixing system (230 V)  
REF 140 0093 0

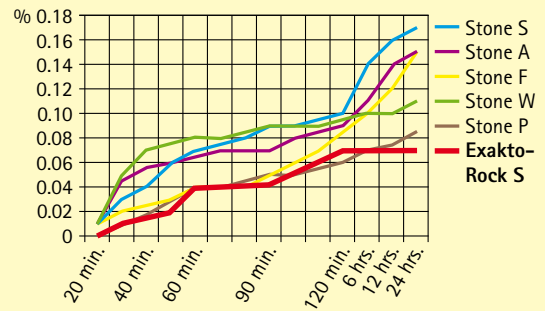


Master pin drill unit  
REF 140 0092 0  
(without 15° base)

# Expansion stop helps ensure an accurate fit

Two hours after mixing it is possible to carry out further work as a result of the expansion stop. This increases the accuracy of fit of the dental prosthesis.

It is not possible to conceive of a digital future without plasters, if only because of the high level of attention to detail and the further processing steps compared to digitally produced plastic models. The expansion time and the start of modelling play a significant role in the accuracy of fit of the dental prosthesis. This is why brendent plasters are set with an **expansion stop after two hours at a maximum of 0.08%** (Exakto-Rock S and Thixo-Rock). The dental technology work is generally started after this period of time. Any further expansion would make the accuracy of fit of the dental prosthesis produced significantly worse, increasing the monitoring and fitting time at the practice.



Measurements are carried out with the precise KoEx measuring device and a digital dial gauge to carry out a simple check on the plaster's expansion. For the first time ever, an expansion measuring device can also be used to measure the contraction of impression materials to determine the link between the two materials.



**KoEx Measuring Device**  
1 piece including  
2 contraction inserts  
REF 110 0148 0

The accuracy of fit of the dental prosthesis is significantly affected by the expansion of the model material. If a plaster expands from 0.08% to 0.12% as a result of a subsequent expansion, this equates to a further expansion of 50%. In large-span bridge constructions, this can lead to inaccuracies which are extremely noticeable in the fixed implants.



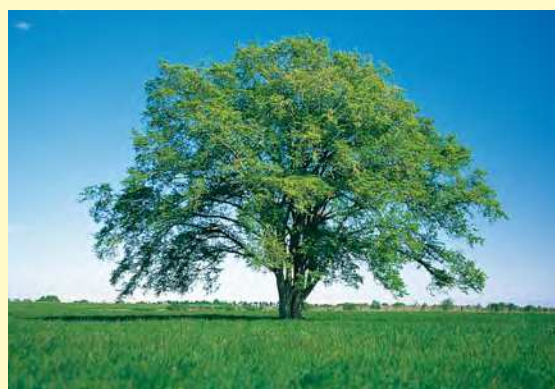
# Exakto-Rock S – formaldehyde-free, class IV super hard plaster

The raw materials for Exakto-Rock S are synthetic. This means that a consistently high quality of end product is achieved, which in turn guarantees a reproducible model manufacture in the laboratory.

- extremely low expansion values of just 0.08% with an expansion stop after two hours for dental prosthesis with an accurate fit
- high compressive strength for utmost edge stability
- smooth surface ensures accurate reproduction of details
- excellent surface detection in all scanners provides the perfect working basis
- optimum reflection of light results in perfect readability and simplifies the workflow

## Formaldehyde-free

The formaldehyde-free formula of the plaster offers processing which is healthy for the dental technician and enables holistic dental prostheses free of harmful substances to be manufactured.



## Scannable

The best possible light reflection of all components enables exact legibility in all scanners. Digital adjustments are reduced and inaccuracy is avoided during digital fabrication of dental restorations.



## Precise

The distinctive precision of the class IV super hard plaster for the toughest requirements offers everything you need for success. The material properties are tailored to dental technology needs.



# Exakto-Rock S for the digital world

High-quality restorations require an excellent basis



Scanner:  
eScan by bredent



The scannable class IV super hard stone enables precise readability in all scanners thanks to optimum light reflection of all components. Digital adjustments are reduced and inaccuracy is avoided during digital fabrication of dental restorations.

Excellent surface detection in the scanner facilitates the design and provides the basis for high-quality, precision-fit dental restorations. Expansion is completed after 2 hours, which enables fast further processing.

# Exakto-Rock S for high-precision models

Minimal expansion enables the fabrication of precise dental arch models or master models



An exceptional processing time span of six minutes also enables to pour several impression at the same time whilst avoiding any stress.



The high thixotropy facilitates building up the stone and hence allows the fabrication of high-quality models. Precise restorations are obtained thanks to the high level of accuracy of the stone and the resulting smooth surface.

## Technical data Exakto-Rock S

Color	brown, ivory
Mixing ratio	100 g / 20 ml dist. water
Soaking time	20 sec
Manual mixing time	20 sec
Vacuum mixing time	40-60 sec
Processing time	5-6 min
Setting time (Vicat time)	approx. 10 min
Removal of model after	40 min
Compressive strength after 1 hr	above 60 MPa
Compressive strength after 24 hrs	85 MPa
Hardness after 1 hr (Brinell)	200 MPa
Hardness after 24 hrs (Brinell)	280 MPa
Linear expansion after 2 hrs	< 0,08 % (no further expansion)



### Color ivory:

1 x 2 kg REF 570 OSE5 2  
5 x 2 kg REF 570 OSE5 1  
10 x 2 kg REF 570 OSE5 0



### Color brown:

1 x 2 kg REF 570 OSB5 2  
5 x 2 kg REF 570 OSB5 1  
10 x 2 kg REF 570 OSB5 0

# Thixo-Rock

Class IV super-hard stone with distinctive thixotropy and perfect flowability

- very good stability enables a simple construction
- high edge stability is offered by the exact exposure of the preparation margins and enables sawing with no risk of splitting
- sufficient processing width for stress-free pouring of several impressions



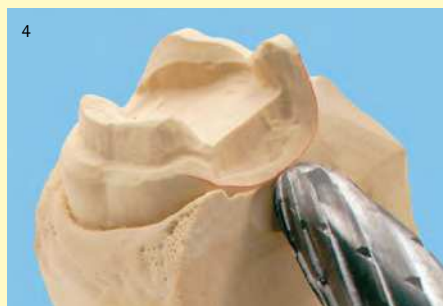
Thixo-Rock offers high stability on the spatula and thixotropic consistency on the vibrator. Simple and clean processing is ensured.



The excellent processing time span allows bubble-free pouring of numerous impressions with just a single mix.



The arches can be cut and trimmed without the formation of chips.



Preparation limits of the dies are not damaged when grinding the dies. No breaking of edges when removing the model. Consequently, precision-fit restorations are obtained.

## Technical Data Thixo-Rock

Color	brown, ivory, grey
Mixing ratio	100 g / 20 ml dist. water
Soaking time	20-30 sec
Vacuum mixing time	60 sec
Processing time at 23°C	5-6 min
Setting time (Vicat time)	approx. 10 min
Removal of model after	45 min
Compressive strength after 1 hr	above 60 MPa
Compressive strength after 24 hrs	85 MPa
Hardness after 1 hr (Brinell)	200 MPa
Hardness after 24 hrs (Brinell)	280 MPa
Linear expansion after 2 hrs	< 0,08 % (no further expansion)

Accessories:

## Generation M – the progressive bur concept

The new surface processing is generated by changing the clearance angle, leading to even better milling behaviour and enabling a longer service life.

### H263 M7 40

The very coarse serration M7 in combination with the popular universal form enables an exact processing of stumps without chipping the edges.



### H274 M7 40

The combination of flat surfaces and rapid material removal means that time can be saved when working.



### Color brown:

1 x 2 kg REF 570 0005 2  
5 x 2 kg REF 570 0005 1  
10 x 2 kg REF 570 0005 0



### Color ivory:

1 x 2 kg REF 570 00E5 2  
5 x 2 kg REF 570 00E5 1  
10 x 2 kg REF 570 00E5 0



### Color grey:

1 x 2 kg REF 570 00G5 2  
5 x 2 kg REF 570 00G5 1  
10 x 2 kg REF 570 00G5 0

# Fluid-Rock

The consistency of low-viscosity class IV base plaster Fluid-Rock enables vibration-free pouring of the base shape. This enables the production of saw-cut models with an accurate fit. The light blue colour can be suitably combined with all dental crown plasters.



1 Mix Fluid-Rock base stone in the ratio of 100 g powder and 25 ml distilled water to achieve a highly fluid consistency.



2 Fluid-Rock base stone is directly poured into the model former without using a vibrator. Perfect flow characteristics allow to obtain models without any bubbles.



## Technical Data Fluid-Rock

Color	blue
Mixing ratio	100 g / 25 ml dist. water
Processing time	approx. 6 min at 18° to 20° C
Setting time (Vicat time)	approx. 11 min at 18° to 20° C
Compressive strength after 1 hr	48 N/mm <sup>2</sup>
Compressive strength after 24 hrs	55 N/mm <sup>2</sup>
Setting expansion	< 0,06 % (no further expansion after 2 hours)



Low expansion ensures constant quality when producing models. Perfectly matched with Thixo-Rock super-hard stones.

### Color blue:

- 1 x 2 kg REF 570 OFB5 2
- 5 x 2 kg REF 570 OFB5 1
- 10 x 2 kg REF 570 OFB5 0

Accessories:

## Master-Split model system

A universal model system for economical model fabrication for all dental-technical indications.



### Assortment small

- 1 Model former
- 3 Basis former
- 3 Metal magnetic plates
- REF 360 0124 K



- Master-Split model former small**
- 2 pieces
- REF 360 0118 K

### Assortment medium

- 1 Model former
- 3 Basis former
- 3 Metal magnetic plates
- REF 360 0124 M



- Master-Split model former medium**
- 2 pieces
- REF 360 0118 M

### Assortment large

- 1 Model former
- 3 Basis former
- 3 Metal magnetic plates
- REF 360 0124 G



- Master-Split model former large**
- 2 pieces
- REF 360 0118 G



- Master-Split base former**
- 10 pieces
- REF 360 0118 0



- Metal magnetic plates**
- 50 pieces
- REF 360 0118 1

# Arti-Rock

The snow white articulation plaster with very low expansion enables the exact articulation of the models. This avoids an unwanted increase in the bite, significantly reducing the grinding-in times. The short setting time enables an ideal fixation of the models and rapid further work.



**Arti-Rock**  
 1 x 4 kg Best.-Nr. 570 OARO 4  
 1 x 18 kg Best.-Nr. 570 OAR1 8



Low expansion of only 0.02 % ensures accurate position of the model when aligning according to the anatomic situation. Accurate restorations and reduced grinding time are obtained. Perfect stability and adhesion simplify mounting in the articulator and ensure reliable retention.



When using keys, accurate reproduction of details is achieved thanks to smooth processing of the stone. The final hardness allows easy processing.



The short setting time and low expansion are perfect preconditions for accurate rebasing.

## Technical data of Arti-Rock

Color	white
Mixing ratio	100 g / 40 ml dist. water
Processing time	approx. 3 min
Setting time (Vicat time)	5 min
Compressive strength according to DIN	7,2 MPa
Expansion	0.01 % after 20 min. 0.02 % after 48 hrs.

