



# Recipes

*Aluminumcement, Bone China,  
Porcelain, Casting clay and  
Plaster*



Art Supplies



## Recipes

### Aluminumcement

Binder for e.g. casting stone  
Cures faster than regular cement  
Often used for casting reliefs and images

25 kg Aluminumcement **AC025**  
10 l Water  
1.5 kg Sand or gravel of your choice (or a mixture thereof)

The material is fast drying and heat resistant up to 1100 °C  
Wall thickness must be 5–8 cm

### Bone China

50 kg Kleipoeder Bone China ivory white **KPI08**  
20 l Water  
100 gr Waterglas / sodium silicate **CH160**  
33 gr Dolapix **DHI07**

Liter weight is 1800 gr

### Porcelain

100 kg Porcelain clay powder **KPI17**  
45 l Water  
25 gr Giessfix 162/10 **DHI10**  
10 gr Formsil D **DH11**

Liter weight is 1751 gr

Fill the tank with 45 l of water  
Mixer in the lowest position  
Pour out 25 kg of porcelain clay powder into the tank

Set the mixer to one position higher and add another 25 kg of porcelain clay powder **KP117**

Dissolve 10 g of Formsil D in 0.5 l of warm water  
Dissolve 25 g of Giessfix 162/10 in 0.5 l of warm water

Pour the Formsil D and Giessfix into the tank  
Pour out another 50 kg of porcelain clay powder **KP117** into the tank  
Keep the porcelain running for 2 to 3 hours  
Weigh 5 buckets at 8.7 L per bucket

### Casting Clay

100 kg Steengoed- of aardewerkkleipoeder **KPI01 / KPI02 / KPI03 / KPI05 / KPI06**  
35 l Water  
200 g Gecalceerde soda **CH127**  
160 – 220 cc Waterglas **CH160**

First add the water, then the calcinated soda and finally a minimum of water glass/ Sodium Silicate **CH160**; continue adding water glass/ Sodium Silicate **CH160** until the desired casting mass/density is achieved.

### Plaster

#### Introduction

Plaster is an easily processable material: e.g. for pouring into a rubber mold. Softer plaster types can also be treated with tools such as graters, gouges and planers.

Plaster is a natural product and as a result there may sometimes be slight variations in quality.  
It is of great importance to store the plaster in a dry, cool and dark place!!!

When working with plaster, it is important to maintain a good ratio of plaster and water.

If you're not yet familiar with the processing of plaster, we recommend you accurately measure plaster and water. If you are more experienced: a reasonable plaster / water ratio can be obtained by gently sprinkling the plaster into the water until an 'island' is created in the middle.

#### Procedure

Sprinkling time 1 - 1.5 minutes (apply calmly and evenly)  
Allow to stand for 15 seconds after spreading.

Stirring time 1 - 1.5 minutes.  
Venting Stirring slowly will cause the air bubbles to rise  
Processing time within 10 minutes the plaster will set

#### Curing the plaster

Within an hour the plaster will have sufficiently set.  
Heat is released during curing. After hardening, let the mold dry for a considerable time, this can be done in a warm and/ or draughty room, but not directly above a heat source.

#### Strength of the plaster

Porosity and strength of plaster are almost inversely proportional: soft plasters have a high density; hard species have low density. See Table.

Plaster	Gips/water Kg/liter	Porosity Newton/mm <sup>2</sup>	Hardness	Application
Vigo 60	1.61 / 1	46.0	46	Ceramic molds
Hartform	2.50 / 1	29.0	115	Sculptures
Elfenbein	3.00 / 1	20.0	250	Statues / ornaments

#### Effects

Salt: A small amount of salt speeds up the (curing) process.

Hydrated lime: Slows down the process.  
Temperature: a slightly higher water temperature will speed up the process, but never go above 50 ° C.

Stirring intensity: longer and more intensive stirring speeds up the process, the plaster will become harder and less porous.

Leftovers: throw away old remnants, always make the required amount.  
Plaster has a shelf life of 1.5 - 2.0 years, provided it is kept dry and dark. In a transparent bag it is advisable to process it within a year.