

3D Hand Design

Instructions for use for newborns, babies and small children



Congratulations on purchasing your „Casting Kit“. Please read these instructions carefully before beginning with the design of your „Lucky Hands“!

In three steps you reach the 3rd dimension Moulding – Casting - Completion



Moulding

Moulding is foolproof! With the unique traffic light approach of our moulding material **3D Pro**, you identify the state of the material by its colour.

The extremely quick hardening of **3D Pro** allows for a quick completion of your 3D statue. Please observe that you must work quickly when preparing the mixture of the moulding material and when making the mould.



Casting

Casting is effected immediately after the moulding process. When doing so the completed mould is filled with a special hard plaster.



Completion

Completion takes place after the statue has hardened. The result is a unique, lifelike copy. Every little wrinkle of your baby's hand can be seen!

Before you begin

Please have the following objects at hand:

- A mixing spatula or a clean spoon for the preparation of the moulding compound
- A watch with a second hand (e.g. stopwatch on a mobile phone)
- An accurate kitchen scale
- A measuring cup with a capacity of one litre

And now you can begin...

Here we go...

The Moulding

Use a suitable moulding cup for making the mould. Practise making the mould by putting your hand all the way into the empty cup up to your wrist. Please make sure that the cup is tall enough and also that the model's wrist or ankle is sufficiently surrounded. Provided that it is possible, the fingers should only be slightly bent and spread. While doing so the distance to the inner surface of the cup should be at least 1 cm all around. Important: Knead the bag of moulding powder **3D Pro** thoroughly beforehand.

The following chart will help you determine the necessary amount of water and **3D Pro**.

Cup (in ml)	Water (in ml or grams)	3D Pro (in grams)
200	200	60
300	300	90
400	400	120

First pour the necessary amount of moulding powder **3D Pro** into the measuring cup. Then add water with a temperature of approx. **23°C** for children up to the age of 2. Otherwise use cold water (room temperature).

Important: The cooler the water temperature the longer the setting time.

Now quickly mix the moulding material with the layered spoon for **approx. 30 seconds** if 23°C or in the case of cold water for a **max. of 45 seconds** to a homogeneous and preferably bubble-free compound. Please pay attention that no powder remains on the inside of the measuring cup. Small lumps do not pose any problems while making the mould. However do not mix too quickly! The bubbles in the moulding compound which result from it could lead to unattractive results later on.

Our tip: By lightly tapping on the outside of the cup or by repeated knocking of the measuring cup on the table venting is achieved.

Now you must work quickly. Please observe the colour of the moulding compound when doing so!

Violet Fill the prepared moulding compound into the cup **immediately** after mixing. If you have mixed thoroughly enough there will be no loose powder on the inner surface of the measuring cup.

Pink After decanting **immediately** dip the model all the way into the moulding compound, until up above the joint. The base or sides of the cup may not be touched.

White After **30 to 45 seconds (if 23°C)** or as the case may be **1 to 3 minutes (if cold water is used)** the moulding compound already turns white. Touch it with your finger in order to check if the material is **elastic, firm and no longer sticky**. Carefully move the hand so that air can enter the mould. Just like from a glove, you can now pull the model out.

Check the inner surface of the mould for loose particles of moulding compound and remove these. You achieve the best results when you rinse the mould using slight water pressure, let it drip off and immediately fill it with the casting compound.

Our tip: Add 2 drops of a rinsing agent to the measuring cup, shortly mix, rinse the mould with the contents of the measuring cup and then again pour the water out.

The Casting

First you have to determine the amount of casting compound needed. To do so simply fill the completed mould with water and then pour this amount into the measuring cup. Now you can read off how much casting compound you require.

The following chart will help you determine the amount of casting powder you require. If for example you require 100 ml of casting compound you must mix 160 g of casting powder with 40 ml of water.

So simply multiply the amount of casting compound you determined with 1.6 and then you have the amount of casting powder which you require.

Casting Compound (in ml)	Water (in ml or grams)	Casting Powder (in grams)
50	20	80
100	40	160
150	60	240

Fill the necessary amount of water into the mixing dish. Then pour the **entire** amount of the casting powder into the water all at once (not the other way around). If possible make sure that the powder is completely covered with water and allow it to shortly soak in.

You can again take your time for the following mixing process. With the fork carefully stir the water into the casting powder **for at least 2 minutes**. Knead the powder thoroughly using the fork. Please pay attention that in particular the powder on the bottom is mixed with the water. Mix until a homogeneous, thin fluid, creamy and lump-free mass develops. In this case also make sure that preferably **no** bubbles develop in the casting compound because of your mixing too quickly.

Our tip: By lightly tapping on the outside or by repeated knocking of the container on the table venting is achieved.

Please pay attention that there is no water in the mould. Now pour 1/3 of the casting compound into the mould. By turning and tilting the mould you make sure that all fingers are completely filled with casting compound. Fill the rest of the mould with casting compound, all the way to the rim. While filling the compound into the mould, tap it on the table every now and then. This assures that all areas of the mould are filled and that bubbles rise to the top. The remainders of the casting compound can be left to dry in the mixing dish and can be disposed of with household garbage. Please do not put the remainders in the sewer system or the drain.

Cast your base separately. Fill a part of the prepared casting compound into a suitable cup. Cover the bottom with approx. 1 – 2 cm, depending on how thick you wish the base to be. After approx. 60 minutes you can remove the completed base without any problems.

The Completion

Depending on the size of the statue let the casting compound harden in the mould for **1 to 3 hours**. When you can no longer press into the surface with your fingernail, you can begin removing it. Turn the moulding cup upside down and let the mass of the mould carefully slide out of the moulding cup. Use your thumb and press lightly on the bottom of the moulding cup in order to do so.

Should the mass of the mould not be able to be directly removed from the moulding cup, you can also use a knife to help remove the mould from the moulding cup. To do so carefully slide the knife around the inside of the cup so that air can get between the mould and the inner surface of the cup. Or simply cut open the bottom of the moulding cup carefully and then push the mould out.

Remove the moulding compound carefully from the surface of the hardened casting compound by breaking it away piece by piece. Start at the thin end or at the wrist and when doing so pay attention to damageable structures of the model as for example very fine fingernails or anything similar. You therefore secure your artwork from being damaged.

In case there is slight unevenness on the surface, you can carefully remove it with either your fingernail or with a dull object. Now rinse the model with water.

Done!

If necessary, remaining moulding material can be removed with a little wooden stick. Should small bubbles or unevenness have developed on the surface, you can seal these by mixing water with a small amount of casting compound and using a damp finger to apply this to the damaged spot.

You can eliminate any remaining unevenness by carefully using sandpaper. If necessary, you can also smooth out the base. Now place your statue on a waterproof mat and leave it at a dry and warm location for 72 hours so that it can thoroughly dry.

Our tip: Your statue is not thoroughly dry until you place it on a piece of paper and it does not make the paper become wavy.

Seal your unique keepsake e.g. with a high-grade acrylic varnish glossy or matt in order to protect it against dust and therefore prolonging its lifespan.

Do not glue the base made of casting compound to the statue, e.g. with instant adhesive, until both pieces are thoroughly dry.

Instructions

Store the original packaged bags cool and dry at 10° to 20°C.

After use seal the rest of the material tightly. For this purpose please use the original bag or if necessary the included air-tight sealable bag.

Minimum durability when taking the indicated storage conditions into consideration is 6 months.

**3D Hand Design is not a toy.
It is not suitable for children under 14 years of age to play with.**

Do not ingest the moulding or casting compound. In the case of eye contact immediately rinse with water and consult a physician.

Keep out of reach of children.

The prepared moulding compound is difficult to remove from clothing. Should the moulding compound stain a piece of clothing, let it harden and simply brush it out until only powder remains are left. Then rinse with warm water.

The moulding compound **3D Pro** consists of an especially skin-friendly material which is made from natural products on the basis of plants. Our moulding compound is even applied as a product in the field of medicine. Therefore **3D Pro** is also suitable for newborns and small children without any concerns. **3D Pro** is particularly skin-compatible and can be removed from the skin without any problems.

© 3D Hand Design
Michael Wartini, Tannenstraße 118
42283 Wuppertal
Telephone: +49(0)202 2995415
Fax: +49(0)202 2995416
Email: info@3dhanddesign.de
Internet: www.3dhanddesign.de