

# Pregnancy Casting and Other Life Casting

It might seem strange to some of you, but we often get requests for information regarding pregnancy casting. Sometimes we hear of people using dangerous techniques, but more often we get questions that reveal confusion regarding the techniques that are possible. Rather than confuse you even more, please let me explain three methods with their pros and cons, and let you decide what you want to do. These methods may also be used for other life casting. We will start with the highest-quality casting first:

## Three Methods Explained

### **Method 1: Alginate/HydroCal White**

A very soft material called alginate is put on the skin; after it sets it is rubbery, but still delicate. A shell of plaster bandages is put over this layer. The shell helps to keep the alginate from flopping around after it has been taken off. These two layers are taken off together and form a bowl that is an exact negative of the body part. HydroCal White, which is a strong, high-quality plaster-like material, is poured into this bowl and moved around to remove all of the air pockets. After the HydroCal White has set, the alginate and plaster bandages are removed and thrown away, as they can only be used once. **PROS:** This is the most gentle method, and will give you excellent details, right down to every pore and blemish. Body hair is no problem as alginate will gently pull off of hair. **CONS:** This process is expensive compared to other techniques; it also takes the most time, which can be exhausting to the model. **Note:** Plasters other than HydroCal White may be used in this method. See "About Plaster" below.

### **Method 2: Moulage**

Moulage is melted in a double-boiler and brushed onto the body. Moulage melts at a very low temperature and is warm to the skin. As it cools it forms a layer much like the alginate. All subsequent processes are the same as Method 1. **PROS:** Costs less than the alginate process because the moulage can be reused. **CONS:** Safety in heating the moulage is always an issue, plus the thought of all the other people the moulage has been on makes moulage seem rather unsanitary. **Note:** Plasters other than HydroCal White may be used in this method. See "About Plaster" below.

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### **Method 3: Plaster Bandage**

In this process, plaster bandages are used directly on the skin. Unlike the other processes, this plaster bandage shell is the finished piece. This leaves only the form of the body casting, rather than the wonderful details the other methods provide. Because you are using a plaster product, the model must be shaved bare, including the finest down-hair. Plaster will grab hold of every surviving hair and yank it out when the time comes. **PROS:** Much faster and cheaper than the other methods. **CONS:** Must shave the skin, details are lost.

The idea of using plaster bandages always leads to the question, "Why don't we just use regular plaster?" If you've tried it before you know the answer is simple. Solid plaster is very tenacious; sometimes your bone structure can be locked into a solid plaster mass. Plaster bandages are thin and CAN be pried off in case there is a problem. Another problem with solid plaster is the heat generated when the plaster hardens. This can cause up to second degree burns. Don't use solid plaster directly on the skin under any conditions. It is only a popular misconception that this is what is done in Hollywood. Professionals use moulage, alginate, or if the budget permits, laser body scans.

## **How Much Material?**

The next logical question about casting has to do with how much material is needed. This can vary dramatically with you, your technique, your model, and if you are clumsy like me. Here are some general guidelines:

### **How Much Prosthetic Alginate? (Method 1)**

Front of a face, 1/3 lb.

Full Face and neck, 1/2 lb.

Full head, 1 to 3 lbs.

Full head, neck and shoulders, 3 to 5 lbs.

For other parts of the body, you generally want to cover the body area with an alginate layer from 1/4" to 3/8" thick. It takes about 1/3 lb. of alginate to cover the area of a standard handkerchief in this thickness. Remember that if you put it on too thick, the alginate will cause the tissue to sag, like excessive gravity; if you put it on too thin, the alginate will have thin spots which will break or tear apart easily.

### **How Much Moulage? (Method 2)**

Front of a face, 2 lbs.

Full Face and neck, 4 lbs.

Full head, 5 lbs. min.

Full head, neck and shoulders, 10 to 15 lbs.

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For other parts of the body, figure 1/2 pound covers an area about the size of a standard handkerchief. Moulage is much more dense than alginate so sagging can be more of a problem.

### **How Much HydroCal White or other plaster? (Methods 1 and 2)**

There's no set method of calculating the amount of plaster you need. Experience tells us that you will probably use everything you mix anyway.

### **How Many Plaster Bandages? (all methods)**

Note: two to three layers or more is best.

Front of face, one 4" plaster bandage

Full Face and neck, 1 1/2 to 2 6" plaster bandages

Full head, about 12 6" plaster bandages

For other parts of the body, figure the square footage of the area you want to cast and compare this with the square footage of the plaster bandage you want to use. Use a minimum of three layers and roll the edge (Like the rolled edge of a cooking pot) for much more strength. Remember that the plaster bandages don't just have to hold the alginate, they have to support the HydroCal White or other plaster that you will be putting into the mold. Strength is not of as much importance if a plaster bandage cast is your finished product (**Method 3**).

## **About Plaster (More than you'll ever want to know)**

Believe it or not, not all plaster is plaster. If you want a fragile and inexpensive body cast, use "Casting" plaster. You can buy it at your local hardware store or craft store for a fraction of the shipping cost to get it from me.

For tummy casting, we recommend HydroCal White for several reasons. First, it is much stronger than plaster; the psi (pounds per square inch) of White is about 9,000 psi compared to Plaster of Paris at 2,400 psi. This gives White a "stone"-like feel. In the mold, I like to shape the White into a hollow bowl form to cut down on weight and to give the finished product a more artistic appearance. It takes about 3 to 5 lbs. of White to cast a face and up to 50 lbs. to do a human torso, unless it's Uncle Ted, who needs much more.

Another advantage of using the White is the nice consistent white color of the finished piece. If you use UltraCal 30, you will have a strong piece, but it will be slightly green. If you use patching plaster from the hardware store you will get a light gray with black dots. You can color plasters with any kind of neutral, water-based pigment. This includes everything from craft paint to water colors. In some parts of the country you can get masonry pigments. Personally, I like to

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mix the color into the plaster so that if it gets chipped, it won't betray a big white scar.

Well, that's a brief overview. There's much more to the process than these simple instructions, but most of that will be picked up from your first attempt. The learning curve is high with these materials so don't be afraid to experiment a bit before trying something big. If you want to attempt a professional-level project I recommend you get one of the many books or videos that touch on the subject.

**Recommended Books:**

- *Techniques of Three Dimensional Makeup*, by Lee Baygan
- *Special Makeup Effects*, by Vincent J-R Kehoe
- *Stage Makeup, 8th Edition*, by Richard Corson
- *Stage Makeup Step-By-Step*, by Rosemarie Swinfield

**Recommended Videos:**

- *Techniques of Life Casting*, with Rob Burman
- *Magic Molding and Casting*, with Steve Biggs

**All recommended materials, books, and videos are available from Special Effect Supply.**

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