



SETTING YOU UP FOR SUCCESS

Mold Making and Casting Guide

ComposiMold is made by Wizbe Innovations
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Customer Image Above:
Jean Combs, Cake with Fondant Tools Made with ComposiMold-FC

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What will you create?

We think you will enjoy the world of mold making. What you make is only limited by your imagination and skills. People make castings from molds for figurines, toys, jewelry, prototypes, ornaments, and much more. Whether you are an inventor, model railroader, artist, sculptor, toy maker, doll maker or hobbyist, mold making is a fun way to make your creations.

We are excited about our products and our customers. Please contact us to tell us about your projects.

CompositiMold products are great materials to enable you to learn mold making. Our heat and pour mold making material and our Putty can both be re-melted and reused continuously. What better way to learn the skills of mold making? Other molding materials can be used for mold making (and some of those methods will be discussed later on), but only CompositiMold can be used repeatedly for many different molds. Also, if you mess up, no worries! Whenever you need to, just re-melt your mold and start again.

Enjoy the mold making process! ~The CompositiMold Team

Below is an ever growing list of mold making projects that we have tried ourselves or that ComposiMold customers have shared with us. Let this list inspire your next project and don't forget to send photos!



CONFECTIONERY ARTS

Chocolate Castings, Fondant Push Molds, Cupcake Toppers, No-Bake Cookies, Molded Butter, Party Favors

HOBBY

Model Parts and Accessories, Figurine Duplication, Planes, Trains, and Automobiles



ARTS AND CRAFTS

Original Sculptures, Figurines, Vessels, Prototypes, Art Instruction, Children's Camp Projects, Crayons

MAKERS

Prototype Development, Robotics, Experimentation, Original Inventions in Mold Making and Casting



HOLIDAY

Gifts, Decorations, and Ornaments: Stars, Santas, Tree Toppers

TOYS

Action Figures, Blocks, Letters, Farm Animals, Trucks, Doll Faces, Doll House Furniture



GARDEN

Stepping Stones, Unique Stauettes, Gnomes, Sun Burst Plaques, Molds of Natural Objects: Rocks, Leaves, Acorns, Beach Shells

THEATRICAL

Masks, Puppets, Custom Set Designs, ComposiMold as Fake Skin



ARCHITECTURAL ORNAMENTATION

Corbels, Finials, Plaster Reliefs, Prototypes

DECORATIVE

Wax Candles, Drawer Pulls, Boxes, Electrical Wall Plate Covers, Wind Chimes



JEWELRY

Cuff Bracelets, Pendants, Pottery Beads, Necklace Pendants, Earrings

TAXIDERM

Fishing Lures and Flies, Fish Molds, Claws and Natural Objects, Plastic Animal Eyes

Creative Inspiration

The best advice we can give you when it comes to mold making with ComposiMold is to experiment with your own unique ideas. You will find that the reusability of this tool makes the mold making process stress free and fun. If you make a mistake or you are inspired in a different direction...JUST RE-MELT and make a new mold.



ComposiMold; Reusable Mold Making Materials

This chapter will explain what ComposiMold is and how it can be of benefit to you as an artist, hobbyist, or cake decorator.

Mold Making 101

Mold making is the process used to duplicate three dimensional models. Through the use of a mold making material, such as ComposiMold, a negative of a model part is made. That negative can be used to cast a second part that is the same as the original part in size and shape.

The steps involved in mold making and casting can be as simple as pressing a shape into clay and then using that clay as the mold. More complicated parts may include several part molds, rigid molds, inserts, a variety of resins and fillers, and a lot of setup and thought.

This book discusses several methods for starting to mold using ComposiMold. ComposiMold is a mold making material that is used by melting and pouring. Many casts can be performed using the same mold. ComposiMold is good for the mold maker and craft artist because it can be reused to make many different molds without worrying about wasting mold making material (such as urethanes, silicones, or Alginate). ComposiMold is an excellent material for those wanting to learn and become involved in sculpting, modeling, and mold making without having to worry about mistakes or wasting material.

The format of this book starts with information about ComposiMold Products and its benefits,



Please visit our social media sites for networking, video tutorials, and ComposiMold news!

facebook.com/composimold

simple instructions on how to make your own ComposiMold mold, information about compatible casting materials, and instructions to inspire you for 35 different mold making projects with ComposiMold.

We do our best to answer many of the typical questions in the *Frequently Asked Question* Chapter. As you experiment you will begin to see how the process works and learn what works for you. The book ends with photographs of projects some of our most inventive customers have come up with. We hope they inspire you to use ComposiMold in ways we never would have thought of.

The best instructions that we can give are to experiment and talk with others. Networking is easy on our Facebook, YouTube, and Blog pages. You will see that you can make molds and castings in lots of different ways. Trial and error are our favorite methods of mold making. With ComposiMold you won't waste any time or money in the process.

Please visit our social media sites for networking, video tutorials, and ComposiMold news! Links for these sites are on our website at:

www.ComposiMold.com

What is ComposiMold?

ComposiMold is a heat and pour mold making material. **It is eco-friendly (certified non-toxic), Microwaveable, and Reusable!**

ComposiMold-Original, Flex, and Firm are flexible, rubbery, molding materials that can be melted poured and reused. This material is a thermoplastic mold making material that works well for small mold parts using many different casting materials including plaster, cement, epoxy, polyurethane, polymer clay, and others.

ComposiMold-Food Contact can be used with food item casting materials such as chocolate, fondant, cookie dough and many others.



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Please visit our social media sites for networking, video tutorials, and ComposiMold news! Links for these sites are on our website at:

www.ComposiMold.com

Advantages of Using ComposiMold

Advantages of ComposiMold include:

Advantages:

Low Cost
Ease of Use
Reusability
Earth
Friendliness

- ✓ Lower costs over many mold making materials. The lower cost is especially true as you make more unique molds. Instead of being able to make one mold, you can re-melt the ComposiMold and make 10 to 50 different molds.
- ✓ Ease of use. ComposiMold is a one part system that does not require a scale or any measurement.
- ✓ Reusability. The ComposiMold can be continuously re-melted to make new molds as you learn and experiment.

Comparison of Popular Mold Making Materials

| | ComposiMold Original and Food Contact | ComposiMold-Firm | Silicone mold making material | Urethane Rubber | Latex |
|----------------------------|---|---|---|--|--|
| General description | Excellent for multiple molds, simple and easy tool for developing mold making process and great on the budget, Good tool for any mold makers tool-kit | Excellent for multiple molds, simple and easy tool for developing mold making process and great on the budget, Good tool for any mold makers tool-kit. Firmer than ComposiMold for two part molds or polymer clay push molds. | Great for large casting runs after you know what and how you are going to make your molds | Good for large casting runs after you know what and how you are going to make your molds | Good, low cost brush-on system used in conjunction with a backing material |
| Hardness | 6-12 Shore A hardness (temperature dependent) | 20-25 Shore A hardness (temperature dependent) | Various version ranging from 5 to 100 Shore A hardness | Various version ranging from 5 to 100 Shore A hardness | Various versions from 10-80 Shore A hardness |
| Elasticity | 150% Elongation | 150% Elongation | Elongation ranges from 50-1000% depending on type | Elongation ranges from 100-1000% depending on type | Elongation ranges from 150-500% |

COMPOSIMOLD REUSABLE MOLD MAKING MATERIALS

| | <u>ComposiMold Original and Food Contact</u> | <u>ComposiMold-Firm</u> | Silicone mold making material | Urethane Rubber | Latex |
|---|---|---|--|--|--|
| # Castings per mold | 3 to 15 castings per mold | 3 to 15 castings per mold | 20-100 Castings per Mold | 20-100 Castings per Mold | 20-40 Castings per Mold |
| # Molds that can be made with same mold making material | Thermoplastic material can be continuously re-melted. Certified up to 35 times | Thermoplastic material can be continuously re-melted. Certified up to 35 times | 1x use, Thermoset -cannot remake the mold | 1x use, Thermoset-cannot remake the mold | 1x use,-cannot remake the mold |
| Eco-friendliness | Biodegradable, non-toxic ingredients (food safe ingredients) | Biodegradable, non-toxic ingredients (food safe ingredients) | Non-biodegradable, toxic components until mixed and cured | Non-biodegradable, toxic components until mixed and cured | Non-biodegradable |
| Method to make molds | 1 part mold making-melt in the microwave and pour | 1 part mold making-melt in the microwave and pour | 2 part system, measure or weigh each part to combine into a rubber | 2 part system, measure or weigh each part to combine into a rubber | Dries over time, put down in layers, each layer dries before putting on next layer |
| Cost | Cost remains the same no matter how many different molds you make: Cost per mold goes down the more you use it. | Cost remains the same no matter how many different molds you make: Cost per mold goes down the more you use it. | Cost typically high-each mold cost the same. | Cost typically high, but lower than silicone, each mold cost the same | Cost typically lower than silicone-each mold cost the same |
| Backing Material | Works well as backing material | Works well as backing material | Can reduce cost by using it as a brush-on material with a backing material | Can reduce cost by using it as a brush-on material with a backing material | Works as brush-on material. Typically need backing material for stable molds |

COMPOSIMOLD REUSABLE MOLD MAKING MATERIALS

| | <u>ComposiMold Original and Food Contact</u> | <u>ComposiMold-Firm</u> | Silicone mold making material | Urethane Rubber | Latex |
|----------------------------------|---|---|---|---|---|
| Time needed to make molds | Melting occurs in a few minutes using a microwave or double boiler. Molds are ready when cooled. Place in freezer to speed up cooling. Smaller Molds can be completed in 1/2 hour | Melting occurs in a few minutes using a microwave or double boiler. Molds are ready when cooled. Place in freezer to speed up cooling. Smaller Molds can be completed in 1/2 hour | 4-24 hours depending on type of silicone. | 4-24 hours depending on type of urethane. | 1-2 hours per layer if dried with hair dryer or overnight for each layer. |
| Limitations | Melting point of 130 F. * | Melting point of 130 F. * | Can only make one mold | Can only make one mold | Can only make one mold |

| | <u>ComposiMold Original and Food Contact</u> | <u>ComposiMold-Firm</u> | Plaster Molds | Alginate |
|----------------------------|---|---|---|---|
| General description | Excellent for multiple molds, simple and easy tool for developing mold making process and great on the budget, Good tool for any mold makers tool-kit | Excellent for multiple molds, simple and easy tool for developing mold making process and great on the budget, Good tool for any mold makers tool-kit. Firmer than ComposiMold for two part molds or polymer clay push molds. | Low cost, takes patients and skill to master | Good body molding material for one or two time use, if used quickly |
| Hardness | 6-12 Shore A hardness (temperature dependent) | 20-25 Shore A hardness (temperature dependent) | Hard | 5-15 Shore A hardness |
| Elasticity | 150% Elongation | 150% Elongation | No elongation | 20-50% |
| # Castings per mold | 3 to 15 castings per mold | 3 to 15 castings per mold | 1, typically need to break mold to remove casting | 1 to 3 casts, if mold does not dry out |

COMPOSIMOLD REUSABLE MOLD MAKING MATERIALS

| | <u>ComposiMold Original and Food Contact</u> | <u>ComposiMold-Firm</u> | Plaster Molds | Alginate |
|--|---|---|---|---|
| # Molds that can be made with same mold making material | Thermoplastic material can be continuously re-melted. Certified up to 35 times | Thermoplastic material can be continuously re-melted. Certified up to 35 times | 1 | 1 |
| Eco-friendliness | Biodegradable, non-toxic ingredients (food safe ingredients) | Biodegradable, non-toxic ingredients (food safe ingredients) | Can be reground to use as filler | Biodegradable |
| Method to make molds | 1 part mold making-melt in the microwave and pour | 1 part mold making-melt in the microwave and pour | 2 part system, measure or weigh each part to combine into a plaster | Mix with water |
| Cost | Cost remains the same no matter how many different molds you make: Cost per mold goes down the more you use it. | Cost remains the same no matter how many different molds you make: Cost per mold goes down the more you use it. | Low cost | Cost is somewhat high |
| Backing Material | Works well as backing material | Works well as backing material | Works well as backing material for one time use | Works well with body casting |
| Time needed to make molds | Melting occurs in a few minutes using a microwave or double boiler. Molds are ready when cooled. Place in freezer to speed up cooling. Smaller Molds can be completed in 1/2 hour | Melting occurs in a few minutes using a microwave or double boiler. Molds are ready when cooled. Place in freezer to speed up cooling. Smaller Molds can be completed in 1/2 hour | 10-24 hours for mold to cure | 10-20 minutes |
| Limitations | Melting point of 130 F. * | Melting point of 130 F. * | Can only make one mold and one casting. Not flexible | Can only make one mold. Dries out quickly |

*All ComposiMold versions can handle higher temperature casting materials by cooling the mold prior to pouring in the higher temperature casting materials.

Limitations and Warnings

The thermoplastic nature of CompositMold allows it to be re-melted and easily molded; yet heat is also the major limitation. In larger thermoset reaction the heat can exceed the melting point of CompositMold. Do not exceed 130° F during resin curing or pouring of hot casting materials unless the mold is cooled prior to pouring in the casting material.

CompositMold is excellent for making many castings from the same mold. However, it will wear down over several cycles depending on the temperatures reached during casting, the type of mold release used, and complexity of the molds.

LIMITATIONS:

Limitations include:

- Less strength as compared to silicone or polyurethane molds
- Large molds may melt due to exothermic reaction of the casting material
- Less longevity per mold as compared to silicone or polyurethane molds
- Lower casting quantities than some other materials

WARNINGS:

CompositMold materials are safe if used properly and as directed. Please Note:

CompositMold is hot when in liquid form and can burn. Use gloves to protect yourself from heat. The plastic containers will melt if overheated and the CompositMold will break down. Do not exceed 200° F.

Do not eat or drink the CompositMold or CompositMold accessories.

Wearing heat resistant gloves, long sleeve clothing, and masks are recommended to minimize skin contact from the hot material.



CompositMold is recommended for ages 12 and up. Mold making and casting is not for unsupervised children. Keep all materials out of the reach of children.

Keep CompositMold covered when it is not going to be used for long periods. Over time, uncovered CompositMold, may dry out and begin to stiffen. Molds may shrink over time if allowed to dry out.

A dust mask is recommended when working with the plaster powder as a casting material as the inhaled plaster dust particles may be breathed into your lungs.

ComposiMold Frequently Asked Questions

Q. How Much ComposiMold do you need?

A. The critical information that you need to know is ComposiMold has a density of 1.2 grams per cubic centimeter or 0.7 ounces per cubic inch. In most cases approximately a 0.5 inch on the outside of your mold is enough to provide support to your mold.

ComposiMold has virtually no shelf-life if kept covered. It's as handy a tool to keep around.

Start by figuring out the size of your part. If your model has a simple shape, the easiest way to estimate is to take the length, width and height dimensions as an estimate in cubic centimeters or cubic inches. To this dimension, add an inch to each dimension and find the total area of your mold (Or use the volume of your container that you will be molding the part in) Subtract the part size from the container size and multiply by the density of the ComposiMold. This will give you the amount of ComposiMold you need.

Here is an example:

The part to be molded is 4.5 x 6 x 0.5 inches. It is suggested to use about a 0.5 inch of ComposiMold around to provide support.

So 5.5 x 7 x 1.5 inch container. 57.75 cubic inches of material

Minus the original piece $4.5 \times 6 \times 0.5 = 13.5$ cubic inches. So $57.75 - 13.5 = 44.25$

Convert to weight. ComposiMold has a density of 1.2 g/cc (0.7 ounces per cubic inch) so: $44 \times 0.7 =$ about 30 ounces of ComposiMold to make this mold.

ComposiMold is also convenient because if you decide to make the mold bigger or use too much material, you can just reuse it later, so it is not just wasted unlike most mold making materials.

Q. How much casting material to do you need?



A. As you practice with Mold Making, you will typically just guesstimate how much casting material you will need. With inexpensive materials like plaster and concrete on small parts that is fine, for larger parts you may want to figure out the amount more accurately. In most cases, you are better off making a little extra than not having enough.

To find out more accurately how much casting material you need, you can measure how much rice it takes to fill up a mold and use the same amount of casting material.

Or you can measure the dimensions of your part with a ruler and find the volume that way.

Q. What kind of casting materials can I use?

A. ComposiMold can be used with many mold materials including:

- Plaster, Hydrocal, Ultracal, Dental Plaster, etc.
- Concrete or Cement
- Many Polyurethanes
- Silicone (Tin or Platinum Cured)
- Epoxy (Clear Casting Plastic)
- Clays

ComposiMold melts at 130 F. Any casting that creates heats up to more than 130F will melt the ComposiMold. If you are using a higher temperature material that has a temperature of 130 F to 180 F, you can typically freeze the mold and still cast with the casting material (such as wax or soap, but not low melt metals)

The ComposiMold-FC (Food Contact) is great for chocolates, molding chocolate, gum paste, and fondant. Isomalt is typically a little too hot.

Q. What are the advantages of using ComposiMold over Silicone molds?

A. ComposiMold is less expensive and much more forgiving in terms of allowing you to fix mistakes (Reheat or use a heat gun to heat an area) compared to silicone. Silicone is typically longer lasting for single molds, has excellent flexibility, and typically easy mold release. Disadvantages of silicones include the inability to fix the mold or reuse the material (you cannot fix them or recast them).

One of the first ways ComposiMold was used was as a backing to brush on silicones and polyurethane molds to reduce the costs. By using silicone with the ComposiMold you get the benefits of the long lasting mold if needed without the expenses of large amounts of silicone.



Q. How long does it take for the ComposiMold to solidify?

A. Solidification times depend on the shape and size of the molding. The larger the size, the longer it will take. You can speed up the solidifying by putting the part in a refrigerator, freezer, or using an ice pack.

VIDEO LINK:

[How Avoid Bubbles In Your Mold](https://youtu.be/DrZS3NLf51g)
<https://youtu.be/DrZS3NLf51g>

Q. How do I remove bubbles from the ComposiMold Mold?

A. When making your mold, an excellent way to reduce bubble formation is to use Bubble Buster over your mold release before pouring your melted ComposiMold over your original part. Bubble Buster is a PVA-water solution. Spray, wipe, or dip your original part with this solution. The PVA reduces the surface tension and stops bubble formation. If this does not work, the bubbles could be caused by quite a few different things.

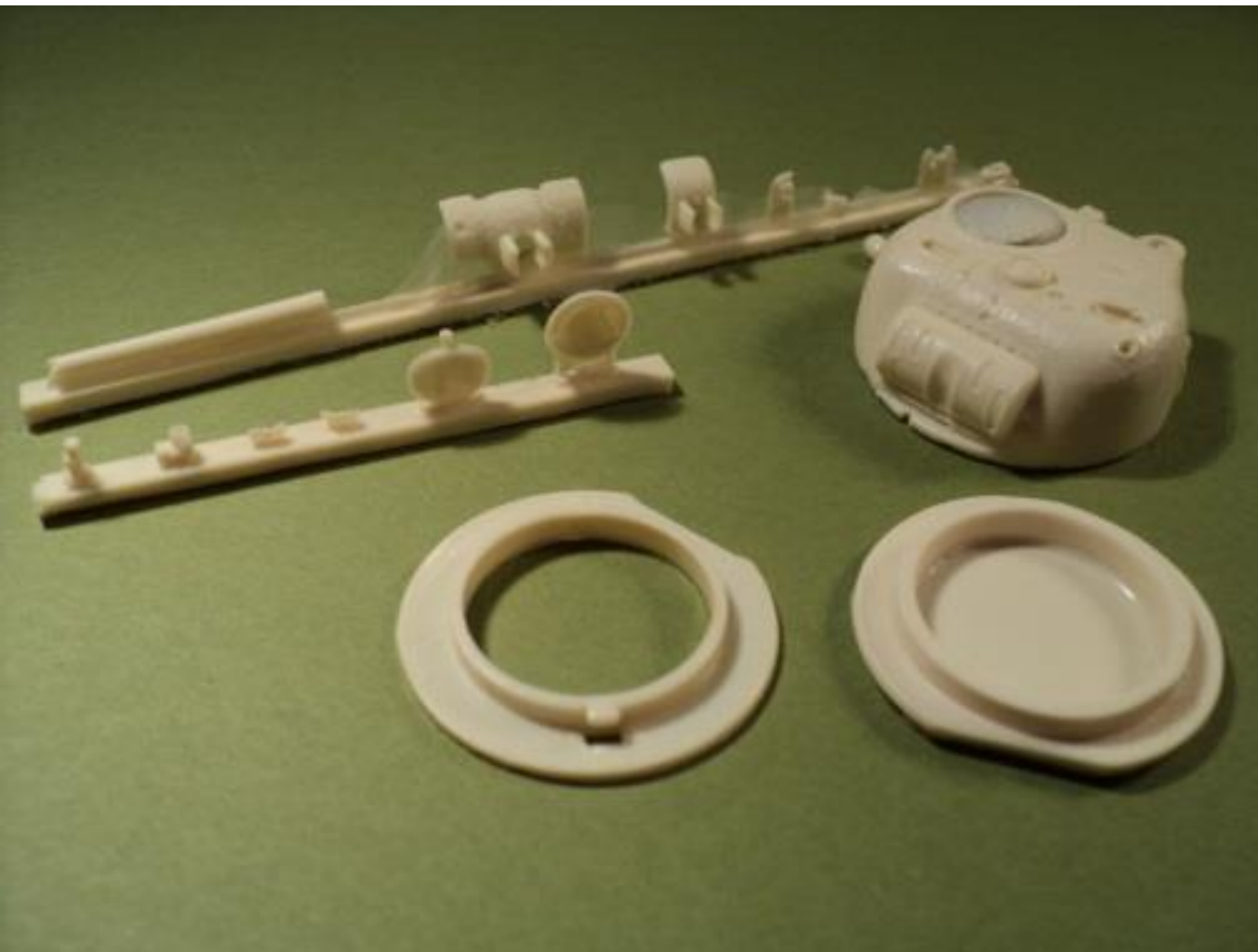
POTENTIAL CAUSES FOR BUBBLES IN YOUR MOLD:

- If your original master part is not sealed correctly, bubbles may come out from the part. This is probably the cause if you are using plaster, clay, or wood as the master. **FIX:** To solve, seal the master first with several layers of polyurethane spray or wood sealers. Elmer's-like glue (PVA glue) works well to seal parts. In some case petroleum jelly can stop the air from escaping from your original part.
- Bubbles may be forming because you have too much mold release, so the interaction causes bubbles. **FIX:** Be sure to wipe off any excess.
- You may have bubbles in the ComposiMold from bubbling in the microwave. **FIX:** It may be worthwhile to re-melt the ComposiMold and let it cool at room temperature so the bubbles can rise to the top and escape.
- Sometimes when you are making your casting, bubbles form because the heat from the resin (polyurethane and even hotter is epoxy) melts the ComposiMold. **FIX:** You can reduce the amount of exotherm by adding fillers into the resin so the resin mass per volume is less. The filler also absorbs some of the heat. Some typical fillers include sand, plaster, flour, and many specialty fillers that can be purchased.
- You may be putting bubbles in when you pour the ComposiMold into the container holding the original master. **FIX:** The best way to avoid this is to just pour gently into the lowest area of the mold so the ComposiMold rises up over the part. Be sure any holes are filled with the ComposiMold, and you are not trapping air.

COMPOSIMOLD REUSABLE MOLD MAKING MATERIALS

You can also do quite a few things to get rid of bubbles that are in your mold while the mold is still liquid:

- You can use a toothpick or other object to push out the bubbles. This works well in small cracks or under undercuts
- Before sticking the ComposiMold in the freezer to cool, let it sit out for about 10 minutes to let the bubbles rise to the surface.
- Vibrate the part by pushing on the sides or even better a back massager against the mold sides.
- You can also paint on a thin layer of ComposiMold over the areas where the bubbles are forming. If you let this cool, you can be sure the bubbles won't be against the master part.



What is ImPRESSive Putty?

ImPRESSive Putty can be applied directly to almost any model; capturing the finest detail and curing within minutes. ImPRESSive Putty can be used to make molds of sculptures, prototypes, candles, picture frames, coins, etc. You can cast wax, clay, low melt plastics, low melt metal, and a variety of resins into ImPRESSive Putty. ImPRESSive Putty may be remelted and used over and over. No expensive equipment is necessary.

HOW TO USE IMPRESSIVE PUTTY

Heat

- Place the Putty in an oven safe bag.
- Add 5-8 drops of the Activator to the bag.
- Seal the bag with an oven safe plastic tie.
- Heat the Putty in the microwave until completely melted (see estimated microwave times below). Caution!! IT IS VERY HOT.

| Size | Microwave times (estimates-times will vary) |
|-------|---|
| 1oz. | 14 seconds |
| 6oz. | 15 second intervals until melted |
| 16oz. | 30 second intervals until melted |

You can also melt in a double boiler.

Let the Putty cool to a temperature comfortable to the touch before removing from the bag (115F or less.)

Duplicate

To make molds, smooth the putty to remove lines and make into a shape large enough to hold your master object. If you are planning on moving your mold before it solidifies place it on a plate. Next push the ImPRESSive Putty over your master part or push the master part into the putty.

When necessary apply a Mold Release. This is not typically necessary.

Let the ImPRESSive Putty solidify. The master object is ready to be removed from the mold when the putty does not deform when pressed with your finger. At room temperature, leave the mold overnight or move your mold to the freezer to solidify faster. Wait 1 hour before de-molding the object. Remove the master part from the ImPRESSive Putty. Apply a Mold Release if/when necessary to the mold, and pour or press in your casting material.

Reuse

With the ImPRESSive Putty, many casts can be made with the same mold including wax, and plastic casts. When you finish making duplicate parts, reuse the Re-Usable molding putty to make more molds and cast parts.

The unique aspect of ImPRESSive Putty is that it can be continuously remelted and reused to make new, unique molds.

IMPRESSIVE PUTTY MOLD MAKING TIPS

- Spray porous objects such as wood and cloth with water. Water helps pull the putty into highly detailed areas of the object. Once the putty touches the damp porous surface do not attempt to remove it until completely solidified.
- Do not add water to smooth objects, putty will move and it may create cracks.
- Wait for the putty to cool to about 80 Fahrenheit before molding. At higher temps it will slowly droop losing its shape. In some situations where drooping may be beneficial, use it at higher temps. (Be careful of burns)
- Smooth the putty surface before attempting to create a mold to avoid creating unwanted lines.
- Wash and thoroughly dry your hands before shaping to prevent sticking to hands.
- The Putty can be carved and sculpted - When molding a sculpture or carving that was created from the Reusable putty, coat it with a mold release such as cooking oil or other safe mold releases.
- Molds will last as long as they are kept out of direct sun and high temps.

ImPRESSive Putty Frequently Asked Questions



Q. What is Activator and why is it separating from the Putty?

A. The activator is important for solidifying the mold and useful as a built in mold release. Activator will slowly leak out of the mold over time. Too much activator on the mold surface is undesirable; remove the excess and pools of the activator with a sponge or dry cloth before pouring your casting resin. Once a mold has been made, it should be poured (cast) as soon as possible if you want to avoid the leakage.

If the activator is not properly cleaned off the mold, it is possible for resins and other casting materials to become discolored by the mold (but does not seem to affect the quality of the cast.)

When you are finished working with your ImPRESSive Putty mold, place it into a sealed bag until you melt it again for your next mold.

Q. How much Activator do I need to add to my ImPRESSive Putty before microwaving?

A. Simply add 5-8 drops of Activator to the bag of Putty before heating. There is no mixing required.

Q. How long do I have to wait before I can remove my master part?

A. It depends on the thickness of your ImPRESSive Putty mold. A ¼" thick mold will be ready in 30 mins, cooling in the refrigerator.

Q. What is the melting point of ImPRESSive Putty? Can I use quick cure resins in the mold?

A. ImPRESSive Putty's melting point is 185F. This allows you to use higher temperature casting materials in the mold. You can also freeze the mold prior to pouring casting materials with a higher than 185F cure temperature.

Q. Can I use ImPRESSive Putty as my master object in a mold?

IMPRESSIVE PUTTY

A. Yes, you can shape the putty with your hands or tools like you would with clay and then let it harden. Apply a mold release to your original sculpture and then proceed in the mold making process with ComposiMold or ImPRESSive Putty.

Q. What kind of materials can I use to make my casts in ImPRESSive Putty?

A.

- Soap molds
- Low Melt Metals
- Low Melt Plastics
- Plastics or resin castings
- Wax casting (Candles, Encaustics, Crayon Wax)
- Paper Mache molds and casting
- Ice Resin: Great for making jewelry
- Epoxy Casting (resin or putty)
- Polyester
- Push molds using Clays
- Polymer Clay push molds
- ComposiMold can also be poured into a mold.

Q. Can I reuse the ImPRESSive Putty?

A. Yes you can. Simply place the Putty back into the microwave safe bag, **add activator**, and melt back to a dough-like consistency.

Q. Can I melt ImPRESSive Putty in a double boiler?

A. Yes you can. Be sure to seal it in the included bag and do not submerge in water.

Q. How do I clean my ImPRESSive Putty?

A. You can absorb any excess Activator off the Putty surface with a paper towel. When you are using slow cure resins or silicone as a casting material, use Denatured Alcohol to clean the mold. This ensures there is no excess activator left behind that could transfer to your casting.



Mold Making Terms and Definitions

CASTING MATERIAL A casting material is a material that will take on and keep the shape that a mold gives.

COMPOSIMOLD ComposiMold is a reusable mold making material that works by melting and pouring. Many casts can be performed using the same mold. ComposiMold is good for the mold maker and craft artist because it can be reused to make different molds without worrying about wasting mold making material (such as urethanes, silicones, or Alginate). ComposiMold is an excellent material for those wanting to learn and become involved in sculpting, modeling, and mold making without having to worry about mistakes or wasting material. ComposiMold is flexible, rubbery, molding material that can be melted poured and reused. This material is a thermoplastic mold making material that is great for small mold parts using many different casting materials including plaster, cement, epoxy, polyurethane, and others. ComposiMold can be used for molds, mold making, and as a rubber casting material.

DE-MOLD TIME The de-mold time is the time required to pass before the casted part can be removed from the mold.

EXOTHERM An exotherm is the heat of reaction that occurs when a thermoset resin or rubber cures. This is of concern with ComposiMold because higher exotherms can melt the ComposiMold. Larger sized pieces create more heat. The type of resin used also affects the amount of exotherm. Plaster and concrete have low exotherms. Polyurethane is also relatively low. Epoxy typically has a higher exotherm. Fillers can be used to help reduce the amount of exotherm.

FILLERS Fillers are added to resins to reduce cost or provide specific properties. Many fillers are suitable to adding to casting resins including plaster, flour, sand, metal powders, fibers, sawdust, or specialty fillers. Heavy fillers can absorb some of the heat of the exotherm, but this will result in heavier parts. Lighter fillers can make parts float. An important use of fillers is to reduce the cost of a part. For example, adding ½ the resin volume with sand will reduce the cost of a casting by almost half.

MASTER/MODEL/ORIGINAL PART These terms are used to describe a 3-dimensional object you use as a pattern so you have something to make a mold of. Typically, the 3-dimensional object is initially made by sculpting, carving, construction, or other method. Found objects make great master parts as well.

MOLD A mold is something that will give a certain shape to a casting material. A way to look at this is as the three dimensional negative of your master.

MOLD BOX A mold box is any container you use to hold your master part and the melted ComposiMold. Be sure it is made of a flexible material such as a plastic

food container and that it can withstand the heat of the melted ComposiMold. You can also build a mold box out of folded tin-foil or line a shipping box with a trash bag for larger molds.

MOLD RELEASE/RELEASE AGENT is a substance that prevents one material from sticking to another. Potential Mold Releases are water, mineral oil, vegetable oil, PVA mold releases, and specially formulated mold releases.

PAINT-ON/BRUSH-ON MOLDS Paint-on molds are made by painting the molding material directly onto a model's surface. The advantages of a paint-on mold are that it is possible to use less material and you can mold parts that you could not do with a typical molding process. An example where you may need to use a Paint-on mold is making a mold of something attached to a wall.

PUSH MOLDS Push Mold is a technique used when you push the casting material into the molds. For example, you can push polymer clay into the ComposiMold mold to make your shape.

IMPRESSIVE PUTTY is our newest, reusable, mold making material that can be pressed onto your master part. You can also press your master part into the ImPRESSive Putty. This material is great for making molds of objects that cannot be moved to a mold box, easy one and two part molds, and handling higher temperature casting materials. It can be continually remelted and reused.

SPRUE A sprue is the opening in the mold where you pour in the casting material. Sprues are also added into the mold in locations where air would be entrapped into the casting. The sprues provide a way for the entrapped air to escape.

THERMOPLASTICS Resins or plastic compounds which in their final state as finished articles are capable of being repeatedly softened by increased temperature and hardened by decrease of temperature by means of physical change.

THERMOSETTING PLASTICS (THERMOSETTING) Resins or plastic compounds that solidify into a plastic that cannot be re-melted. Thermosetting resins are often liquids at some stage in their manufacture or processing, which are cured by heat, catalysis or other chemical means. After being fully cured, thermosets cannot be re-softened by heat.

UNDERCUTS are areas on your master part with indentations or severe angles. These areas will determine the type of process you use to get the best results. You will also want to be sure that air bubbles don't get trapped in these spots.



How to Make a Basic ComposiMold

Now we will walk you through the MELT, MOLD AND CAST, and REUSE process of creating a ComposiMold.



MELT:

Melt the ComposiMold by heating in the microwave or double boiler.

Microwave times will vary. Start with short heating times until you understand how the microwave will heat the ComposiMold.

MOLD AND CAST:

To make molds, simply pour the ComposiMold over your master part after applying a Mold Release and Bubble Buster. Let the ComposiMold solidify by cooling. Remove the master part from the ComposiMold, apply a Mold Release to the mold, and pour or press in your casting material.

REUSE:

With the ComposiMold, many casts can be made with the same mold including plaster, wax, and plastic casts. When you finish making duplicate parts, reuse the ComposiMold to make more molds and casted parts.

The unique aspect of ComposiMold is that it can be continuously re-melted and reused to make new, unique molds.

IMPORTANT:
All versions of
ComposiMold are
Food Contact
Safe.
ComposiMold-FC
is labeled for Food
Contact.



Just RE-MELT to RE-USE

COMPOSI·MOLD®

Heat and Pour Mold Making Materials

903 Western Ave., Manchester, ME 04351 #1-888-281-2674 or info@ComposiMold.com and Please visit: www.ComposiMold.com



COMPOSIMOLD PRODUCTS

ComposiMold-Original

Our flexible rubbery, molding material that can be melted, poured and reused up to 35 times.

ComposiMold-Food Contact

Specifically designed for edible casting materials such as chocolate and fondant. It complies with FDA Regulations (21 CFR Parts 170-189) for food contact materials.

ComposiMold-Firm

A firmer version of ComposiMold with a Shore Hardness of approx. 25 at 70°F, perfect for push molds.




Visit www.ComposiMold.com for more information and tutorials.

COMPOSIMOLD IS a reusable mold making material that works by melting and pouring. There is no mixing or weighing involved! When you've finished making your castings the ComposiMold mold can be re-melted and re-used to make up to 35 different molds. **The more you use it the more you save.**

ComposiMold is Versatile and Easy to Use.

Use techniques such as one part, two part, pourable, and paint-on molds. It is great for learning to mold, making many unique molds, and as a cost effective mold backing material too!

ComposiMold is Natural and Biodegradable.

All ingredients used in ComposiMold are organic materials that will biodegrade in an aqueous environment. 

ComposiMold is Reusable!

You never have to worry about wasting the product or your money. **If you want a different mold, just re-melt the mold to re-use the material up to 35 times!**

Warnings:

- ComposiMold is hot when melted. Use gloves for protection.
- The ComposiMold container WILL melt if overheated. Do not heat the container when it is empty.
- ComposiMold will break down in water over time. Do not leave in contact with water.
- Keep ComposiMold covered when not in use.
- ComposiMold conforms to ASTM D-4236 for safe art supplies.
- Do not use ComposiMold for food contact after it has been used with non-food casting materials.

Limitations:

Although the thermoplastic nature of ComposiMold allows it to be reusable and easily moldable, heat is a limitation. In larger thermoset reactions the heat of your casting material can exceed the melting point of ComposiMold, 130°F. Be sure to cool your mold prior to using higher temperature casting materials.



BASIC INSTRUCTIONS



MELTING ComposiMold:

To melt, heat the ComposiMold to 130°F. (Do not exceed 200°F). This can be done in a double boiler or a microwave.

When heating in the microwave follow these steps:

1. Remove the cover from the ComposiMold container.
2. Heat the product. Estimated heating times are listed in the table below:

| SIZE | MICROWAVE TIMES (ESTIMATED) |
|--------|---------------------------------|
| 10 oz. | 30 sec. intervals until melted |
| 20 oz. | 1-2 mins. (Stir every 30 secs.) |
| 40 oz. | 2-4 mins. (Stir every 45 secs.) |

- ✓ **TIP: Keep in mind that microwave times will vary. Start with short intervals until you feel comfortable with your microwave.**

3. After microwaving, gently stir the ComposiMold to let the temperature equilibrate before pouring.



CREATING Your Mold:



1. Anchor the master to the bottom of your mold box with clay or hot glue.
2. Spray a mold release on the original object being molded (the master) and in the heat safe container you'll be pouring your

melted ComposiMold into (mold box).

4. Pour melted ComposiMold into the lowest area of your mold box so it will rise up and over your master part.

SOLIDIFYING Your Mold:

1. Simply let your mold cool. ComposiMold solidifies when it cools back to a flexible, rubbery, polymer.

(To speed up the process, you can put your mold in the refrigerator or use ice packs against it.)



2. De-mold your master by pulling it out or make a cut down the side of the mold and open it like a book. Tape it closed before you make your cast.

CREATING Your Cast:

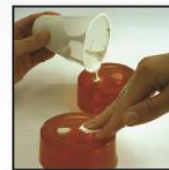
Many different casting materials can be used in the ComposiMold Mold.

Examples of casting materials include:

- Polyurethane, Epoxy, Polyester Resins
- Wax, Soap (freeze ComposiMold first)
- Various types of Plasters and Clays
- Cement/Concrete
- Silicone
- Chocolate and Fondant (Use ComposiMold-FC)

- ✓ **TIP: Cool your mold prior to pouring higher temperature casting materials (before each pour) to maintain the integrity of your mold.**

1. Follow individual product instructions for the casting material you have chosen.



2. Apply a mold release to your mold prior to pouring the casting material.

3. Pour or press your casting material into your mold and let solidify per product instructions.

4. Once solidified, remove your cast from your mold.



ComposiMold's greatest advantage is its reusability. All you have to do is remelt your mold and pour!

- ✓ **TIP: Some casting materials can leave debris in the ComposiMold. Follow the instructions below to filter it out.**

FILTERING the ComposiMold:

Simply re-melt your dirty ComposiMold and filter it through cheesecloth into a heat safe container and re-use!

CLEANING the ComposiMold:

Use a cold, damp cloth to wipe away any casting material. Be sure your mold is dry before making more casts.



Please visit www.ComposiMold.com for more advanced techniques.

Mold Release and Bubble Buster

Applying a mold release to your original object will allow it to be easily separated and removed from the ComposiMold. Also applying a mold release to the mold before casting will minimize wear and tear on the mold. This is important if you are using the mold to make many reproductions.



Applying Mold Release to your Original Object:

- Spray a light mist coating of Mold Release over the entire surface of the original object and all surfaces of your mold box (and any surface that will come in contact with the ComposiMold). You can also use a clean paint brush or cloth to apply the mold release. Make sure that intricate details, undercuts and hard to reach areas are coated as thoroughly as possible.
- Wipe off any excess mold release to make sure you do not have too much.

Applying Bubble Buster to your Original Object:

- Spray a thorough coating of our Bubble Buster over your original object over the mold release. Make sure that intricate details, undercuts and hard to reach areas are coated as thoroughly as possible. Bubble Buster is useful when making your mold as it reduces bubble formation in the ComposiMold.
- Continue with your mold making process by pouring the melted ComposiMold over your original object.

Applying Mold Release to your ComposiMold When Making Your Casts:

- Spray a light mist coating into the entire cavity of your ComposiMold. You can also use a clean paint brush or cloth to brush the release agent into the cavity of the mold. Make sure that intricate details, undercuts and hard to reach areas are coated as thoroughly as possible.
- Wipe off any excess mold release to make sure you do not have too much.

- Continue with your casting process by pouring or pushing your casting material into your mold per product instructions.

Do you need a special mold release when molding with ComposiMold?

We sell a Silicone Mold Release and Vegetable Oil Mold Releases that work well for mold making. Silicone is not appropriate for food items.

Try these options as a mold release as well:

- Petroleum jelly (Vaseline)
- Cooking Spray
- Mineral Oil
- Soap
- Motor Oil
- Spray Lubricants (WD40, ArmorAll)

The best bet for determining the effectiveness of a specific mold release is to experiment. With ComposiMold you can!



MELT; Melting the ComposiMold

MICROWAVE:

Melt the ComposiMold by heating above 130°F in the microwave. Microwave times will vary. Start with short heating times until you understand how the microwave will heat the ComposiMold. Below are general guidelines to melting ComposiMold in the microwave.

| Container Size | Microwave times (estimates-times will vary) |
|----------------|---|
| 10 oz. | 30-60 seconds |
| 20 oz. | 3 to 5 minutes, stir every minute |
| 40 oz. | 7 to 10 minutes, stir every minute |

After microwaving, stir and let the temperatures equilibrate throughout the molding compound. You can even leave a small portion of the material un-melted and let the heat of the melted ComposiMold melt this portion. This will equilibrate the temperature and make it perfect for pouring over your master part.

WARNING: The ComposiMold container will melt if overheated. Do not heat the container without the ComposiMold in it. Also, the ComposiMold will be hot. Be careful.

Be sure you aren't boiling your ComposiMold!
Boiling will introduce too many bubbles and burn the material.

DOUBLE BOILER:

You can also melt in a double boiler. A double boiler consists of one container inside another container with water between them. The bottom container will sit directly on the heat source.

Put your ComposiMold container into the inside container. It can sit on top of marbles or rocks to keep the ComposiMold container off of the bottom of the pot.

The purpose of the double boiler is to keep the heat from getting above 212°F. If the ComposiMold container is on a stove top directly, the container will melt.

Heat the ComposiMold until it is melted.

Solidifying ComposiMold

ComposiMold solidifies when it cools back to its flexible, rubbery consistency. So to solidify, just let the part cool. To speed up to process, you can put your mold in the refrigerator or use ice packs against a larger mold.

Do not submerge the ComposiMold in water to cool.



MOLD AND CAST; Making a Mold and Casting

Begin by choosing or making your original part that you want to mold. This object is also called a master, or model part. Your master can be made of a variety of different materials such as clay, wood, stone, plastic, glass, concrete, bone, paper, metal, fabric, etc.

SEALING THE SURFACE OF MASTER:

Models made of porous materials (plaster, some clays, concrete, wood, etc.) should be sealed to eliminate any surface porosity. To seal your model you can use shellac, wax, petroleum jelly, or specially formulated sealing materials.

WEIGH/SECURE YOUR MASTER PART DOWN:

Parts that are hollow or generally light weight will float to the surface of the melted ComposiMold. This can be very frustrating. Just take a deep breath and de-mold the part once the ComposiMold has solidified. The next time around you can weigh a hollow part down by filling it with sand and plugging the hole with clay OR you can secure the master part to the bottom of your mold box with clay or for more security use hot glue.

PREPPING YOUR ORIGINAL PART:

The part used in the example is a model of a dog. This design is simple because it has a flat surface on one side and no difficult undercuts. For your first part, we'll show you how to make a part with the plaster.

VIDEO LINK:

[Basic ComposiMold
Instruction Video](https://youtu.be/P0INRz3L8i4)

<https://youtu.be/P0INRz3L8i4>

Place the original part into a container with a flat surface and sides. In this tutorial we use a plastic cup and the dog figurine.

Be sure to use a heat safe container that can handle the hot ComposiMold without deforming. Also make sure the master is placed in a container that will hold the mold as it cools. For small molds, it is typically easiest to use a container such as a plastic cup, pan, or Tupperware-like container. Be sure to have enough room for at least a ½ inch of ComposiMold around your part including the top of the model. This space around your model will be the mold thickness.

You can also build a container to prevent the liquid rubber from leaking out the sides or bottom.

If you are using a part that may float, you may need to secure it in place. Methods to secure your part include double sided tape, glue, spray on adhesives, or clay to secure your model to the surface of your container. You can also nail or screw your model in place if necessary.

APPLYING A MOLD RELEASE AND BUBBLE BUSTER:

Apply a light mist of appropriate mold release over the entire surface of the model and surrounding forms (any surface that will come in contact with the ComposiMold).

Wipe away excess mold release.



You can also use a clean paint brush or cloth to brush the release agent over the surface of the model and surrounding forms. Make sure that intricate detail, undercuts and hard-to-reach areas are coated as thoroughly as possible.

NOTE: Do not soak your model with release agent. Over-applying release agent will result in tiny bubbles on the working surface of your finished mold

HOW TO MAKE A BASIC COMPOSIMOLD

(pin-holing) and will be reflected in your cast part taken from the mold. Wipe off all access material.

Be sure to get the mold release in the crevices but do not use so much that it puddles up.

For other casting resins other than plaster or concrete, use mold releases designed for that resin. For most materials, a wax or PVA mold release will work fine.

Apply a coating of Bubble Buster over the mold release to decrease surface tension and bubble formation in your mold.
Melt the ComposiMold as described earlier.

CREATING YOUR COMPOSIMOLD MOLD:

Pour the melted ComposiMold into your mold. Pour the ComposiMold to the lowest point in the container at a slow, constant rate. Let the ComposiMold rise up and over the model. This will displace air from the lowest point and help reduce air entrapment. Also, it may be helpful to heat the master slightly. This may reduce the number of bubbles that form on the surface of the part.

Cover the master part with approximately a ½ inch of ComposiMold. Don't worry about wasting the ComposiMold. You can always re-melt it and start again.



Let solidify by allowing the ComposiMold and model to cool. To speed up the solidifying, you can place the mold in the refrigerator or freezer. Or you can use cold packs against the side of the mold box.

When ComposiMold is solidified, peel the ComposiMold out of the container. Separate the original part from your ComposiMold mold.



You are now ready to make your casting.

MAKING YOUR FIRST CASTING (Plaster is used here as an example)

Place the ComposiMold mold onto a flat surface with the indentation of the part facing upward.

Coat the part again with mold release if necessary. Wipe off any excess mold release.

Mix the plaster with water in a cup as per product instructions.

Pour the plaster into the ComposiMold mold. Tap the part gently or vibrate gently to remove any bubbles that may form and to ensure all the crevices are filled with the plaster.



Let the plaster solidify. It is very difficult to not want to look early at your part. Resist the temptation because the plaster is very fragile at this point. Let it sit for at least an hour. The longer you wait, the stiffer the part will be. Ideally, wait overnight.

After the plaster has solidified, remove the part from the mold. Carefully peel the ComposiMold mold away from the plaster part. The ComposiMold can be stretched away from the casting. The mold will be a duplicate of the original model.



Admire your work.

If you like, cast another part again using the same mold and more casting material.

Next, you can go in many different directions. Try more simple parts: one side of a coin, toy shapes or blocks, block letters etc.



REUSE; Our Greatest Advantage

CompositMold is not only an awesome tool for any artist, but it's both biodegradable AND reusable!

Typical mold making materials are often environmentally *un*-friendly; filled with toxic chemicals for both the user and the environment, made as a one-time-use product, and certainly not *compostable* like our innovative and responsible product. CompositMold is made of 100% natural ingredients and will biodegrade in an aqueous environment.

As a culture we've grown quite used to using products one time and discarding them. CompositMold gives the artist and craftsman the ability to mold and re-mold over 35 times with one container. This frees the mold maker to experiment, make mistakes, and to ultimately create quality molds and casts of almost anything. CompositMold enables this freedom for the art making process while taking responsibility of its environmental impact.

Fixing Molds



Because of the thermoplastic nature of CompositMold, it has the advantage of being able to be patched through heating. This can provide unique molding capabilities for the creative mold maker. For example, molds can be adapted, patched, attached together, holes patched in the molds, or gaps filled or made with purpose.

Filtering the ComposiMold

Casting Materials can often leave debris behind on your mold that cannot easily be wiped off. In this case you can easily clean your ComposiMold by melting it and pouring it through a filter.

FILTER WITH A FUNNEL AND FILTER:

Use a medium mesh paint filter

- Place a filter into a funnel.
- Hold the funnel above a container that can withstand the hot ComposiMold.
- Melt the dirty ComposiMold as you would before pouring a mold.
- Pour the ComposiMold through the filter and into a second container.
- Plan your next mold making project!

FILTER WITH CHEESECLOTH AND RUBBER BAND

You can also use a sheet of cheesecloth and a strong rubber band to filter your dirty ComposiMold.

- Melt the ComposiMold as you would before pouring a mold.
- Put the sheet of cheesecloth folded to determine how many layers you will be using. The more layers of cheesecloth the more filtration you will achieve.
- Lay the cheesecloth over the top of the open container of melted ComposiMold.
- Stretch the rubber band over the rim of the container holding the cheesecloth in place.
- Pour the ComposiMold through the cheesecloth filter and into a second heat safe container.
- Plan your next mold making project!

Cleaning your ComposiMold Molds

Use a cold damp cloth to clean. Let the ComposiMold dry and replace the cover. **DO NOT** use hot water, do not place in the dishwasher, or submerge in water.

For Food Contact Version you can re-melt the ComposiMold after wiping it clean to remove any excess moisture. Replace the cover until your next mold making project!

Mold Material Options

ComposiMold comes in four heat-and-pour varieties and a putty version too! So which one do you choose when it's time to make your project? It depends on your preferred casting materials or your preferred casting technique. Here's a quick guide to help you find the right material for you!

Heat and Pour Mold Making Materials

ComposiMold-Original *Not Too Firm, Not Too Soft, Compatible With Dozens of Casting Materials*

The original Reusable Mold Making Material that works by melting and pouring over the object you choose to mold. It is non-toxic, microwaveable, and reusable over 35 times!

ComposiMold-Food Contact *Specially Made For Your Edible Treats!*

ComposiMold-FC is specifically made for casting Edible Treats! Now you can make your own chocolate molds! Think of it as 35 unique molds for the price of one silicone mold. It's also re-meltable and reusable, food contact safe, and perfect for chocolates, fondants, gum paste, and more.

ComposiMold-Firm *For Push Molds*

Specially formulated for push molds. ComposiMold-Firm has a Shore A hardness of about 20-25 at room temperature and works great for polymer clay push molds or conventional clay push molds. Some cake artists also prefer the stiffer molding material for fondant push molds.

ComposiMold-Flex *Flexible Molds for Soft Casting Materials*

Designed for those who want a more flexible mold. ComposiMold-Flex is perfect for chocolate, waxes, soaps, and other soft casting materials. The ComposiMold-Flex allows you to pull the mold away from the soft casting material without damaging or breaking your creation.

Reusable Mold Making Putty

Make a Mold by applying Putty Directly to Object Being Molded

Can be applied directly to almost any model, capturing the finest detail and curing within minutes. Re-Mold Putty can be used to make molds of sculptures, prototypes, candles, picture frames, coins, etc. You can cast wax, clay, low melt plastics, low melt metal, and a variety of resins into Re-Usable Mold Putty. **ImPRESSive Putty may be remelted and used over and over.** (Currently, it is not available for food contact.)

Select Mold Making Material by Casting Materials:

Soft Casting Materials i.e. chocolate, wax, soap:
ComposiMold-Flex

Edible Casting Materials: ComposiMold-FC (All Heat and Pour Materials are food contact safe)

Polymer Clay OR Fondant for push molding: ComposiMold Firm

Plastic, Epoxy, Urethane/Plaster, Concrete, ComposiStone: ComposiMold-Original

Select Mold Making Material by Casting Technique:

Push Molding: ComposiMold-Firm or ImPRESSive Putty

If you'd rather use a material that you can press onto your master object, instead of pouring over your master object, choose ImPRESSive Putty. This material works great with higher temperature casting materials and for making molds of objects that cannot be moved to a mold box.





Casting Materials

The following is a list of materials that work great in ComposiMold and ImPRESSive Putty. Remember, this list is ever expanding!

COMPOSIMOLD, COMPOSIMOLD-FLEX, AND COMPOSIMOLD-FIRM

Concrete or Cement
 Plastics (Urethane Resins)
 Plaster or Gypsum (Hydrocal, ultracal, dental plaster)
 Epoxy (Clear Casting Plastic)
 Silicone
 Waxes (Candles, Encaustics, Crayons)
 Soaps
 (Be sure to cool ComposiMold molds prior to pouring hot casting materials.)

REMEMBER:
 In larger thermoset reaction the heat can exceed the melting point of ComposiMold.

TIP:
 Cool your mold in the freezer prior to pouring hot casting materials.

ADDITIVES and FILLERS: You can add many materials to your castings to obtain the desired affects. You can add colors to your castings by adding food coloring, oil paints, or dry pigments. Fibers, micro-balloons, lightweight materials, and strengthening materials can be added. Essential oils can be added to scent candles and soaps. Just follow the manufacturer's recommendations for fillers and experiment so you are assured of using compatible materials.

COMPOSIMOLD-FC (FOOD CONTACT)

Chocolate
 Fondant or Gum Paste
 Cookie Dough
 Water to freeze into ice shapes
 Gummies

ADDITIVES: You can add food coloring to your food-item casting materials to obtain the desired effects. You could also add chopped nuts or fruits to your chocolate castings.

IMPRESSIVE PUTTY

| | |
|-------------------------------------|--------------------------------|
| Soap molds | Low Melt Metals |
| Low Melt Plastics | Plastics or resin castings |
| Wax (Candles, Encaustics, Crayon) | Paper Mache molds and casting |
| Ice Resin: Great for making jewelry | Epoxy Casting (resin or putty) |
| Polyester | Push molds using Clays |
| Polymer Clay push molds | ComposiMold as a rubber |

Concrete or Cement

Concrete and cement are great casting materials to use in a ComposiMold because of its good strength and ability to handle the outdoors. It is also extremely inexpensive. You can create your own garden sculptures or stepping stones. Be sure to use a Mold Release and Bubble Buster to reduce bubble formation in your mold.



This bird on a rock sculpture was cast with concrete with red concrete coloring added. Quikcrete rapid curing concrete is another great product.

Don't forget that when you are finished making your casts, that ComposiMold can be re-melted to make a new mold and a new unique shape.

TYPES OF CONCRETE WE'VE USED:

ComposiStone: This is our cement formulation for ComposiMold molds. Composi-Stone is harder than plaster yet still smoother than cement. It uses a dry mix and water at a ratio of 2.5 parts powder to 1 part water; and not less than 2 parts powder to 1 part water by weight or volume. It solidifies to a beautiful light Gray color. The texture is similar to a cement feel, but much smoother in appearance. Composi-Stone is ideal for lawn and shelf ornaments, sculptures, craft parts, and other general applications.



Grancrete: Cures within 20 minutes at 65 F. For very large structures, it may overheat the ComposiMold (we have not tried to find the maximum size yet).

Quikcrete: Fast cure, works well, keep part covered, give at least 24 hours to cure at room temperature.

Concrete Type II (Portland Cement and Sand): Long cure time, Can dry out the ComposiMold if not kept moist.

Hydrocal Gypsum Cement: Works well, Provides a white finish. It is not as strong as the other concretes.

Ultracal: Works well, provides a white finish. It is not as strong as the straight concretes.

There are many other potential concretes. We have not tried all of them. Start with a small sample to ensure that it is working as you would like.



**Mix CompositStone:
2.5 parts Powder to
1 Part Water by
Weight or Volume**



Plastics

Plastic casting materials such as Urethane, Epoxy, and Polyester resins create very professional looking plastic castings. With ComposiMold you can cast resins simply and easily. Larger parts can also be cast by cooling the ComposiMold in the refrigerator or freezer prior to pouring in the resin.



Urethane

The plastic urethane casting materials that we offer are ProtoCast, PureCast and other Urethane Casting Materials for plastic parts.



ProtoCast 85R is a very low viscosity, rapid setting, and rigid urethane compound with high strength and udometer. This system will cure quickly to a hard, tough impact resistant casting. ProtoCast 85R is non-sensitive to moisture after cure and will readily bond to itself, if stage pours are required. The 1:1, by volume, mix ratio makes for easy hand or machine mix. ProtoCast 85R is recommended in applications where a “thermoplastic feel” is desired.

PureCast 605, Urethane Casting Elastomer has a 50-60 Shore D. PureCast 605 is a two component, liquid castable, polyurethane elastomer, that contains no TDI or that is highly resistant to abrasion. It is especially well suited for wet environments. It contains no TDI or MOCA and has low shrinkage. The material, when cured, has outstanding physical properties. It also exhibits high tensile and tear strength along with exceptional abrasion resistance.



POLYURETHANE RESINS WARNING:

- Do not breathe the fumes.
- Use gloves.
- Keep the resin covered when not in use.
- Some urethanes can handle water better than others, so experiment first to ensure compatibility.

Use polyurethane resins in a well-ventilated area. The odor can be harmful and should be avoided. Use gloves when mixing and pouring.

MAKING A CAST WITH Urethane Resins:

To start, estimate the amount of resin you need. A nice method to determine how much resin you will need is to pour rice into your mold. Then pour the rice into a container. The amount of volume taking up by the rice will be the same as what you will use for the casting material.

Mold Preparation:

When using the Urethane Resin with ComposiMold Reusable Mold Making Materials, be sure the ComposiMold mold is completely cooled to room temperature or lower prior to use. Use a mold release that works with urethanes such as our Silicone Mold Release. It may be beneficial to perform a small trial prior to making your part to ensure that the urethane will separate from the mold as you intend.

Mixing:

Before using the resin, make sure the two components are at room temperature. Measure and mix part 1 and part 2, per product instructions, by weight or volume. Start mixing immediately and be sure to scrape the material off the sides of the mixing container. **Mix for at least one minute.**

Your working time can be relatively short so be sure your mold is prepped before mixing.

Fillers can be added into the resin mix to change appearance, reduce weight, or reduce the amount of resin used. Examples of fillers include microballoons, bronze powders, colorants, fly ash, calcium carbonate, and sand. The filler must be dry before being added into the resin. Typically, add the filler into the resin after part 1 and part 2 have been mixed together.



Pouring:

After thorough mixing, pour the Resin mix into the ComposiMold mold cavity. The resin will begin to cure and solidify depending on the temperature. Wait the appropriate amount of time before removing the part from the ComposiMold mold. Less time may deform the part.

Finishing:

Cured urethane can be drilled, sanded, and machined. Use detergent soap to remove the mold release from the urethane prior to painting. Most oil paints should work well for painting but test paint adhesion first.

Cleaning:

To improve clean up after using the resin, spray tools and equipment that may be in contact with the urethane with mold release so the urethane will not stick. If necessary, denatured alcohol can be used as a solvent, but use with caution due to the flammability.

Safety:

Prior to use, read Material Safety Data Sheets (MSDS). Uncured resin may cause eye, skin, dermal and respiratory sensitization. Use in a well-ventilated area. If skin contact occurs, remove with alcohol followed by soap and water. In case of eye contact, flush with water for 15 minutes and seek physician support. The resin will burn if ignited so do not use around flame or other easily ignitable products.



Epoxy (Clear Casting Plastic)



Clear Casting Plastic is the ideal Epoxy Resin for use in CompositMold Molds. It is a jewelry grade, crystal clear resin with a 45 minute working time. It easily mixes 1:1.

Basic Instructions: For crystal clear, bubble-free castings, slowly and thoroughly mix Part A with Part B in equal proportions. Slowly pour into your CompositMold mold that has been lightly coated in CompositMold's Vegetable Oil-Mold Release.

Use Clear Casting Plastic or other epoxies designed for casting for small decorative casts, jewelry, figurines and more. You can even embed other objects into the clear resins for another dimension of personalization.

Polyester

Polyester resins are another option for making plastic casts, although it is much more difficult to work with than urethane, epoxy, or silicone. When the catalyst is added to the resin it will cure into a hard cast. Experiment with polyesters as a casting material by encapsulating objects in the cast such as natural objects or coins or dyeing the resin to the color of your choice.

Silicone

Silicone is a great rubber type casting material to use in a ComposiMold.

Both tin cured and platinum cured silicones work great as a rubber casting material in a ComposiMold.

Plaster or Gypsum (Hydrocal, Ultracal, Dental Plaster, etc.)

Keys for success with casting plaster in ComposiMold:

1. Use 75 parts by weight plaster to 25 parts by weight water.
2. For smooth surface finish, coat the inside of the mold with a flexible coating as a mold release such as plaster soap, rubber coating, or wax barrier.
3. Pull the casting from the mold as soon as possible and allow it to harden for 24-48 hours.

Plaster or Plaster of Paris are great casting materials because they are so inexpensive and work well with ComposiMold. Plaster is a safe, low cost medium that will reproduce fine detail. You can also use Hydrocal, Hydrostone, Ultracal, concrete, and cement.

Plaster is a low cost, easy to use casting material consisting of plaster and water. It does not require accurate measurements when mixing with the water. Once dry, plaster is also brittle so it is easy to break edges or pieces off your cast. So use with care and allow your part plenty of time to cure before handling it. **Once you remove the casting, let it cure overnight before handling any further.**



A dust mask is recommended when working with the plaster powder as the inhaled plaster dust particles may be breathed into your lungs.

To start, pour clean lukewarm water into an empty flexible mixing container.

Use a ratio of 75 parts plaster to 25 parts water by weight when mixing. The more plaster in the water, the stronger the plaster will be when solidified.

A good rule of thumb to determine how much plaster to mix with the water is to pour in plaster until it starts to show on the surface of the

water. Stop adding plaster when there is no more standing water in the bucket. The surface of the combined water and plaster should be mostly grayish in color, with some areas of white dry powder. Let the plaster and water sit for a few minutes.

The water temperature makes a difference. Hot water will speed up the setting of the plaster; cold water will slow it down. Depending on your project, you may want to use either - hotter water may work best for fast turnaround when pouring into your molds.

Take a moment to check that your mold has the mold release applied. Use a stirring stick, wooden spoon or similar object to stir the plaster and water together. Be sure to get the bottom and sides of the container and try to break up any clumps of plaster. Do not whip bubbles into the plaster mix.

Pour plaster into mold starting at the lowest point in the mold to ensure that you do not trap any air below the plaster. After you fill the mold, vibrate the mold gently by tapping it with your fingers or against the table to dislodge any bubbles.



Let stand until the plaster solidifies. This usually takes at least 60 minutes. Preferably let the plaster casting stand overnight.

To clean up, you can use a wet paper towel if the plaster is still wet. Another method is to let it harden in the flexible mixing container. After it is hardened, it can be popped out into the trash by turning it upside down and hitting the bottom and sides of the container with your hand. Do not pour wet plaster down a sink or other drain. It can solidify and may ruin the plumbing. Dispose of unused plaster in the trash. Rinse wet plaster off hands in a bucket of water before washing them in the sink.

Plaster will dry out your hands or skin. You should use gloves when handling. You may want to use hand lotion after mixing.

CUSTOMER PROJECT:

Michael, Gear Clock Made of Plaster in a ComposiMold mold

CUSTOMER PROJECT:
Helene, Pig Sculpture



Wax (Candles, Encaustics, Crayons)

There are plenty of basic candle molds on the market, however if you are trying to create truly unique candle or wax mold designs, then ComposiMold is all you need. With ComposiMold mold making materials, you are able to make as many unique molds as you want.

The key to creating wax castings in a ComposiMold is chilling the mold. You chill the mold in the freezer for a few hours prior to pouring the hot wax and after to cool the hot wax faster. The ComposiMold has a lower melting point than the wax, but because the wax cools at a faster rate than the ComposiMold heats, the ComposiMold will not melt.



CUSTOMER PROJECT:

University of Maine Augusta Student Project, Crayon Wax



Soap

Why use rectangular shaped soap when you can have unique custom-made shapes? You could create your own special design for party and wedding favors, to inspire a child who hates tub-time, or to impress your family members during gift giving season! With ComposiMold, mold making materials, you can make soaps in all kinds of shapes. Try one shape and reuse the material to try another.



The key to great soap casting in a ComposiMold is chilling the mold before and after pouring in the soap if your soap material is hotter than 130 F in liquid form. The ComposiMold has a lower melting point than the soap so as long as the soap cools at a faster rate than the ComposiMold melts, your mold will remain strong and intact.

ADDITIVES: Think about adding food coloring to white glycerin soap to color your creations. You can also add a drop of essential oil to the soap to add a custom scent.

Clays

Push molds are a simple and effective way of making 3-D objects super-fast and easy. For example, buttons can be pushed into a mold in seconds flat using most types of polymer clays or doughy casting materials. You can even sculpt your own master object to then duplicate with the push-mold technique.

Check out the chapter *Rapid Prototyping using Sculpey Clay to Make Masters* to learn more.



When using firmer Sculpey or FIMO type clays, we recommend using the ComposiMold-Firm Mold Making Material. It has more stiffness and can hold up to the pressure of the push mold technique.

ComposiMold-Firm is perfect for push molds.



Chocolate in ComposiMold-FC (or Flex)



How do you make truly unique chocolate and fondant molds that you can't buy in a store? Answer: Make your own custom molds with ComposiMold-FC!

There are plenty of basic molds on the market, however there are many instances when you need a mold of something truly unique and personal to you or maybe a catering client. If you have the need for truly unique chocolate or fondant mold designs, then ComposiMold-FC is all you need. With ComposiMold-FC mold making material, you are able to make as many unique molds as you want with only one container!

MELTING CHOCOLATE

When melting chocolate, do not apply too much heat. Chocolate burns easily. It is best to melt chocolate slowly. Chocolate should only be melted over low heat. Overheating or adding moisture may cause chocolate to thicken and clump.

Double Boiler Method

Break chocolate into small pieces, and place in top pan of double boiler over hot, but not boiling, water. You may also use a glass or metal mixing bowl on top of a saucepan half-full of water. Allow chocolate to melt, stirring occasionally. This will take around 15 minutes for about 1 pound of chocolate.

Direct Stove Top Method (Stove top)

Use very low, even heat. Stir constantly to avoid scorching. Continue this process until the chocolate is almost melted. Then remove from the heat and stir until the chocolate is smooth.

Microwave Method

Using microwave-safe containers, place chocolate in microwave oven at medium power (50 percent) for 1 minute. Remove and stir. If chocolate is not melted, return to microwave and repeat heating step, stirring every 30 seconds to avoid scorching. Continue this process until the chocolate is almost melted. Then stir until the chocolate is smooth. When ready to use it will pour from a spoon like syrup.

Direct Method (Oven)

Turn the oven on at the lowest temperature (100-150 F) and place the chocolate inside. Carefully monitor the chocolate by stirring.

CAUTION:

Water and chocolate are not friends!

Moisture, like water or steam can cause it to have a dull, unappetizing finish, and may thicken it so it will not pour and mold/handle properly.

FILL MOLDS WITH MELTED CHOCOLATE

Either spoon it into the mold cavities, or gently squeeze the chocolate out using a squeeze bottle or piping bag. This squeeze method is probably the most convenient method for smaller areas.

After filling the molds, hold both sides of the mold and tap it lightly on the table top. This will level out the chocolate and remove any air bubbles.

Lollipops: If you are making lollipops, now insert the lollipop sticks into the mold, and with your finger "roll" the stick in its mold position. This will coat the stick all the way around with chocolate so the lollipop will not fall off when being eaten.



COOLING YOUR CHOCOLATE CAST IN THE COMPOSIMOLD

Put the filled mold into the freezer (on a flat surface). Small candies or bite size items will be ready to remove in about 5 minutes or less. Larger pieces will take about 10 minutes. Putting the chocolate in the freezer "quick cools" the chocolate and has the advantages of making it easier to remove the chocolate from the mold.

REMOVE MOLDED CANDY FROM MOLD

Pull the ComposiMold-FC mold away from the chocolate casting. The candy should drop right out. With chocolate that was cooled in the refrigerator you may need to push the candy from the mold.

If there is excess "flash" (a feathered ridge of chocolate along the seam of the chocolate treat) just remove it with a small paring knife to give a nice finished look to your candy.

CLEAN UP

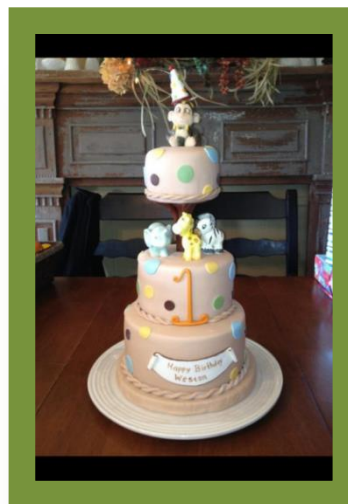
Tap off as much excess chocolate from your mold as possible. Any extra cleaning should be done with a damp cloth. Remove excess chocolate from the containers and squeeze bottles while still melted then set containers in freezer until the chocolate is hard. Flexible containers/squeeze bottles can then be taken out of the freezer and simply flexed. Chocolate will separate cleanly. Use microwave and freezer safe containers for chocolate melting and handling. All such containers should be smooth, flexible plastic, and always be dry. You'll not only get nice looking candy, but the cleanup will be a snap.

REMEMBER:

Use
ComposiMold-FC
for Food Contact.
Do not mix food
molds with other
molds.

STORING CHOCOLATE

Store in a cool dry place, but not in the refrigerator. You can reuse chocolate the same way as you can reuse ComposiMold-FC. Keep covered.



CUSTOMER PROJECTS:

Cake Kakoots, Virginia

Military Medals and Cute Animals on Custom Cakes

Fondant for Push Molds

Fondant and gum paste are very popular cake and cupcake decorating materials. Their pliability makes them great sculpting materials and also perfect for wrapping whole cakes in a great color and texture. We have found that using fondant as a casting material in a ComposiMold-FC Mold is a great way to make lots of intricate casts fast.



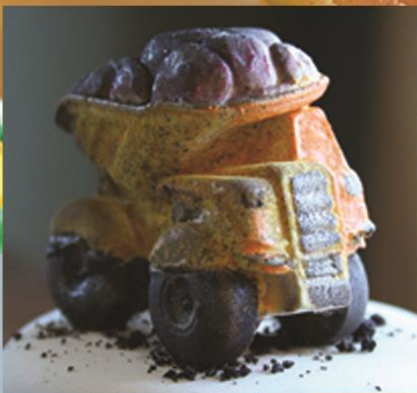
An interesting shape in a shallow ComposiMold-FC makes for a perfect push mold. Simply work your fondant in your hands until it is warm and pliable. Then press it into your ComposiMold-FC until it fills all the crevices of the mold cavity starting with the deepest first. There is no cure time so as soon as you are sure the fondant has filled the mold you can de-mold your cast.

De-mold your cast by bending the ComposiMold-FC away from the fondant cast. This ensures that you will not warp your delicate cast upon de-molding. Your fondant cast should fall away easily. Now you can apply this sweet detail to your cake or cupcake. Repeat!

Cookie Dough (No Rise Recipe)

You can use your ComposiMold-FC as a push mold for raw cookie dough. After pressing the raw cookie dough into your unique ComposiMold-FC, be sure to remove the raw cookie dough shape from the mold prior to baking as per recipe instructions.

Do not put the ComposiMold-FC in the oven. It will melt.



Make Your Own Molds and Casts; Project Inspiration and Step by Step Instructions for 35 Unique Projects

Instructions for 35 different mold making and casting projects with ComposiMold and ImPRESSive Putty. The techniques vary based on the shape of the master, the casting materials used, and the desired effect.

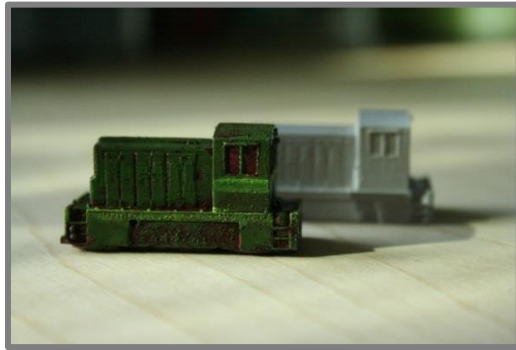
Keep in mind as you look through the following project tutorials that you can substitute the type and shape of master objects and particular casting materials to customize the project based on what inspires you. We have found that a little background is all you need sometimes to get going. Hopefully by this point in this book you have a fairly solid understanding of how to melt, mold, cast, and reuse ComposiMold and ImPRESSive Putty.

So keep an open mind, take your time to prep your master, and don't worry...you can always re-melt to re-use your mold if you make a mistake!

ComposiMold and ImPRESSive Putty enable you to create many unique projects in varying fields of interest such as hobby, crafts, food arts, fine arts, DIY, and special occasion creations!

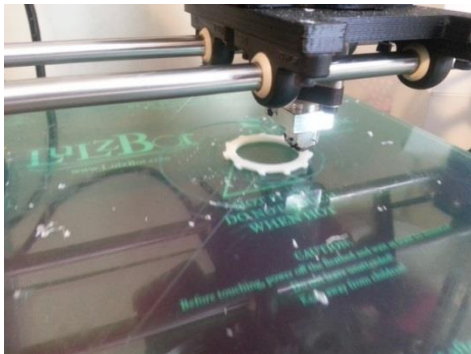
So...what will YOU mold today?

Rapid Prototyping using 3-D printing to Make Masters



The ability to make parts fast and inexpensive is the essence of ComposiMold products. In conjunction with 3-D printing, ComposiMold is a wonderful way to make castings fast, easy, and with very low cost. By using a 3-D printer to make the original, it is possible to make duplicates of all your creations.

1. Make a prototype. With a 3-D printer, it takes knowing how to make a drawing in a 3-D CAD program. There are a number of 3-D CAD programs available. Wizbe Innovations (ComposiMold) has used Solidworks, Rhino3D, and Alibre. Lots of others are also available. Some provide free versions. The most important part is that software must be able to handle STL files.



2. Print your 3-D part. We have used www.zoomrp.com to download files to print with success. We have also ordered printed parts from www.shapeway.com.
3. This is the 3-D printed tire that we will use as our master to create a new set of tires for a model ATV. This design was found on www.Thingiverse.com

VIDEO LINK:

[Rapid Prototyping Using a 3-D Printer and ComposiMold](https://youtu.be/nSxfM_5a9cQ)

https://youtu.be/nSxfM_5a9cQ

MAKE YOUR OWN MOLDS AND CASTS



4. Typically, the 3-D parts will be hollow to reduce cost of the printing, so keeping the part from floating is a challenge. Add sand inside the 3-D printed part with a piece of clay to keep it in. This tire was hot glued to the mold box to keep it from floating.
5. Make your mold as you would for any CompositiMold part. The casts you see here are made with Proto-Cast polyurethane resin and black urethane dye.



CUSTOMER PROJECT:
Greg, Chevy truck headlight stands, c. 1937

Rapid Prototyping Using Polymer Clay to Make Masters

The ability to make parts fast and inexpensive is the essence of ComposiMold products. Rapid prototyping using polymer clay (such as Sculpey, FIMO, etc.) is a good way to make your original master by hand to be duplicated easily in a ComposiMold. In this tutorial we also use the same clay as the casting material with the push-mold technique.



THE PROCESS FOR RAPID PROTOTYPING USING CLAY TO SCULPT YOUR MASTER:

1. Make a prototype. If you are using polymer clay, the process takes artistic skill. If you are a beginner sculptor there are plenty of tutorials online to teach you how to sculpt all kinds of shapes.
2. Bake the clay per product instructions. The clay used in the photos below was a Sculpey brand. The original sculpture was baked for 15 minutes at 275°F.
3. Make your mold of this sculpture as you would for any ComposiMold part.
4. Once the mold is solidified and you have de-molded your original prototype, cut a large enough space for easy access to the mold cavity. This will give you space to be sure you are filling all the details of the mold with clay and that you can easily de-mold your casts without warping your shape.



Star Pendant; Push Mold

You can buy "push molds" to make flowers, faces, hands, and many other objects, but those are someone else's designs. What's more fun and interesting is to make your own molds from your own creations.

Here is an easy way to take your own original design or found object and make your own push mold for polymer clays or other mold making material. It is an easy



process and is a great way to start making your own designs without worrying about mistakes. If you do make a mistake, ComposiMold can be re-melted to make a new mold. ComposiMold allows you to make complex molds easily from an original design.

For a one-sided mold, it is simple. Place your original Master design in a container. Coat the Master design with a mold release. Pour the melted ComposiMold over the Master design and let it solidify. When ComposiMold is solidified,

pull out the original model and your mold is complete.

SIMPLE PUSH MOLD WITH POLYMER CLAY

When you want to make a casting using polymer clay, just press it into your new mold made from ComposiMold. You may need to re-add a mold release if the clay sticks to the ComposiMold. Apply the mold release to the mold before pushing it into the mold. If your clay distorts when you pull it out of the mold, refrigerating the mold and clay will make the clay harder and firmer allowing you to pull it out of the mold more effectively with less distortion.

ADVANCED PUSH MOLD WITH POLYMER CLAY

For deep molds or molds that have undercuts, ComposiMold's flexibility is advantageous to allow you to remove the mold without distorting the clay. Be sure to start by pressing clay into the deep cuts to make sure those areas are filled, then fill the larger areas of your mold with the clay. If your clay distorts when you pull it out of the mold, refrigerating the mold and clay will make the clay harder and firmer allowing you to pull it out of the mold more effectively with less distortion.

Here is an example of a star push mold from an old star light using ComposiMold and polymer clay. This is an image of the material used in this example.

SUPPLIES:

- ComposiMold
- A plastic star light
- A plastic cup
- Kitchen knife
- Sculpey Polymer Clay



Here is the original star light part.



Spray it with a mold release and wipe off any extra. The star is placed on the bottom of the cup.



Let it solidify. This part took approximately 45 minutes to solidify at room temperature. You can speed up the process by sticking the mold in the refrigerator or freezer. For a push mold, it may be helpful to stick your mold in the refrigerator anyway to make the mold slightly stiffer. (ComposiMold-Firm is our stiffer version of ComposiMold, perfect for push molds!)



Polymer clay is placed on the back of the star light to hold it down in the plastic cup and to make this a one-sided mold. I also cut the cup down to a smaller size so it would be easier to see the part in the cup.



The ComposiMold is melted in the microwave and poured into the cup and over your part.



Take the solidified mold out of the cup.

MAKE YOUR OWN MOLDS AND CASTS



This is the bottom (now top) of the mold. You can see the polymer clay stuck onto the star light.



Pull out the star light.



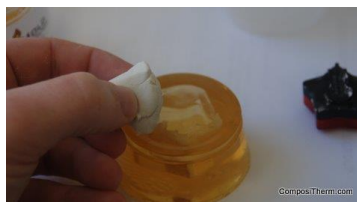
The ComposiMold mold with the star.



Clean up the mold a little by pulling off the extra pieces. You can cut these pieces off with a knife or scissors if you would like.



Pull off the clay from the bottom of the star so you can use the clay in the push mold.



Now when you want to make a shape using polymer clay, just press it into your new mold made from ComposiMold. Take the ball of clay and push it into the mold. The mold deforms when you press it in. For this piece the clay was pressed in the sides of the mold as well to push the polymer clay into place.

MAKE YOUR OWN MOLDS AND CASTS



The first polymer clay star. If your clay distorts when you pull it out of the mold, refrigerate the mold and clay. This will make the clay harder and firmer allowing you to pull it out of the mold more effectively with less distortion.



Clean up the polymer clay star by cutting off the back. For deep molds or molds that have undercuts, ComposiMold's flexibility is advantageous to allow you to remove the mold without distorting the clay.



More stars are made.



The mold can be cut down so only the top portion of the mold is used for the star mold. A serrated kitchen knife works to cut the ComposiMold, but is not necessary. The extra material is peeled away. Extra ComposiMold material will be re-melted and used again for another mold later.



Another star being pushed made in the mold.



Another polymer clay star made from the ComposiMold mold.

TIP: Be sure to start by pressing clay into the deep cuts to make sure those areas are filled, then fill the larger areas of your mold with the clay.

1 part molds; Hand Holds for Rock Walls and Climbing Walls



Here is an inexpensive way to make hand holds and fake rocks for rock climbing walls. You can use real rocks as your master objects or sculpt your own shapes with play dough or clay.

SUPPLIES:

- A natural rock or sculpted rock to use as your master.
- CompositiMold or CompositiMold-Firm.
- A mold-box to secure your rock to that can withstand the heat of the melted CompositiMold. I am going to use a plastic container for these parts. (You can also use aluminum foil for the mold-box. Use 3 or 4 layers of aluminum foil stacked together and the edges folded up to make the sides. Be sure to make the sides high enough.)
- Mold release: I am spraying on a light layer of silicone mold release.
- Casting Materials: I am going to show you polyurethane, epoxy, and cement. Cement is great too, but the hand holds would be cold to the climbers' hands.
- Fillers to add to the resin: I will use sand, gravel, micro balloons, and sawdust. The fillers help to bring down the cost of the casts so you don't have to use as much of the costly resins.
- Bolts and washers: These will be used to attach the fake rock to your wall. 3/8" has plenty of strength.

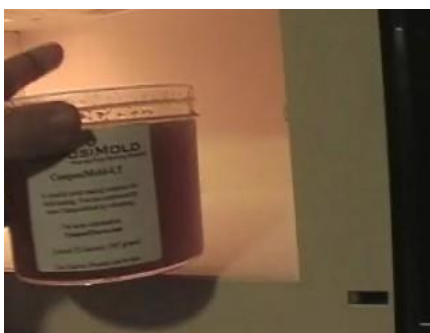
1. Prepare your rock to be molded.

There is always a possibility that your master object could float to the top of your melted ComposiMold. So be sure to secure it to the bottom of the mold-box with clay or hot glue. Then put mold release on the master rock and the mold-box too.



2. Melt ComposiMold.

Follow the directions on the lid of the ComposiMold. Microwave times may vary so start with short intervals and gently stir the ComposiMold to equilibrate the temperature. DO NOT BOIL THE COMPOSIMOLD.



3. Pour ComposiMold over your master rock to be molded.

Pour the ComposiMold into the lowest point of the mold-box and let the ComposiMold rise up and over the rock. This will draw any bubbles away from your master.



4. Let your mold cool and solidify.

You can make it cool faster in the refrigerator or freezer. It took my molds about an hour in the refrigerator. Below is an image of two of the rock molds I made.



5. Remove the rocks from the CompositiMold.

Because we are making a one part mold, this can be done by pulling the master rock out of the whole on the bottom of the mold (the same part of the rock that was on the bottom of the mold-box).



6. Mix and pour your casting material.

Apply a light coating of mold release to your mold and then mix your casting materials with fillers per product instructions (and experimentation) and pour them into your molds.



7. Insert bolts into resin/fillers.

There are two ways to cast your bolt into your rock hand hold. In both examples I held the bolt in place until the material cured.

METHOD ONE: The image on the left shows how I put the bolt in upside down and let the casting material cure. This method allows you to screw the hand hold right into the rock wall with a washer and nut on the back side of the wall.

METHOD TWO: The image on the right shows how I casted the nut, washer, and bolt right into the cast. Once the casting has cured I can unscrew the bolt with a pair of pliers leaving the nut and washer embedded into the casting material.



8. Let the casting material cure.

When you are using resins you'll want to be sure the resin has cooled before removing it from the ComposiMold. This ensures you don't damage the mold.

9. Remove your casting from the mold and repeat the process!

10. Re-Melt to Re-Use.

Remember when you are done making your castings in this mold you can re-melt the material to re-use it for up to 35 unique projects.

Custom Molds for Confectionery Artists

Anyone can use a plastic store-bought mold to pour in chocolate. Boring! How about chocolates or fondant in the shape of a kangaroo or a super hero! What child wouldn't want that on their birthday cake?

VIDEO LINK:

[ComposiMold-FC for Confectionery Artists](https://youtu.be/vKW6aJra-C8)

<https://youtu.be/vKW6aJra-C8>

There are plenty of basic molds on the market; however there are many instances when you need a mold of something truly unique and personal to you or a catering client. If you have the need for truly unique chocolate or fondant mold designs, then ComposiMold is all you need. With ComposiMold

mold making materials, you are able to make as many unique molds as you want with only one container!

MAKING A COMPOSIMOLD CHOCOLATE MOLD:

Follow the basic instructions on our *How to make A Basic ComposiMold* chapter to make a mold with ComposiMold. The tips below will set you up for success when using food items as your casting material.



The Key to Creating Successful Chocolate Castings in a ComposiMold:

The key to creating chocolate castings in a ComposiMold is chilling the mold. You chill the mold in the freezer for a few hours prior to pouring the hot chocolate and after to cool the hot chocolate faster. The ComposiMold has a lower melting point than the chocolate, but because the chocolate cools at a faster rate than the ComposiMold heats, the ComposiMold will not melt.

1. Cool your ComposiMold in the freezer for a few hours.
2. Melt your chocolate per product instructions.
3. Remove Mold from the freezer.
4. Lightly coat your mold with a food safe mold release such as vegetable oil.
5. Pour the melted chocolate into your unique mold using a spoon, stick, or brush to fill the mold. Tap the bottom and sides to get air bubbles out of the chocolate.

MAKE YOUR OWN MOLDS AND CASTS

(If you skip the tapping step you may end up with little holes in your cast.) You may also like using a squeeze bottle to push the chocolate into small openings and crevices.

6. Cool the chocolate in the mold by placing in the refrigerator or freezer.

7. De-Mold by peeling the mold away from the delicious treat as much as possible so you don't put a lot of pressure on the chocolate.

8. Enjoy your one of a kind, custom chocolate castings. Don't forget: When you have made all the chocolate casts that you want with one mold, it can be re-melted to make other molds.

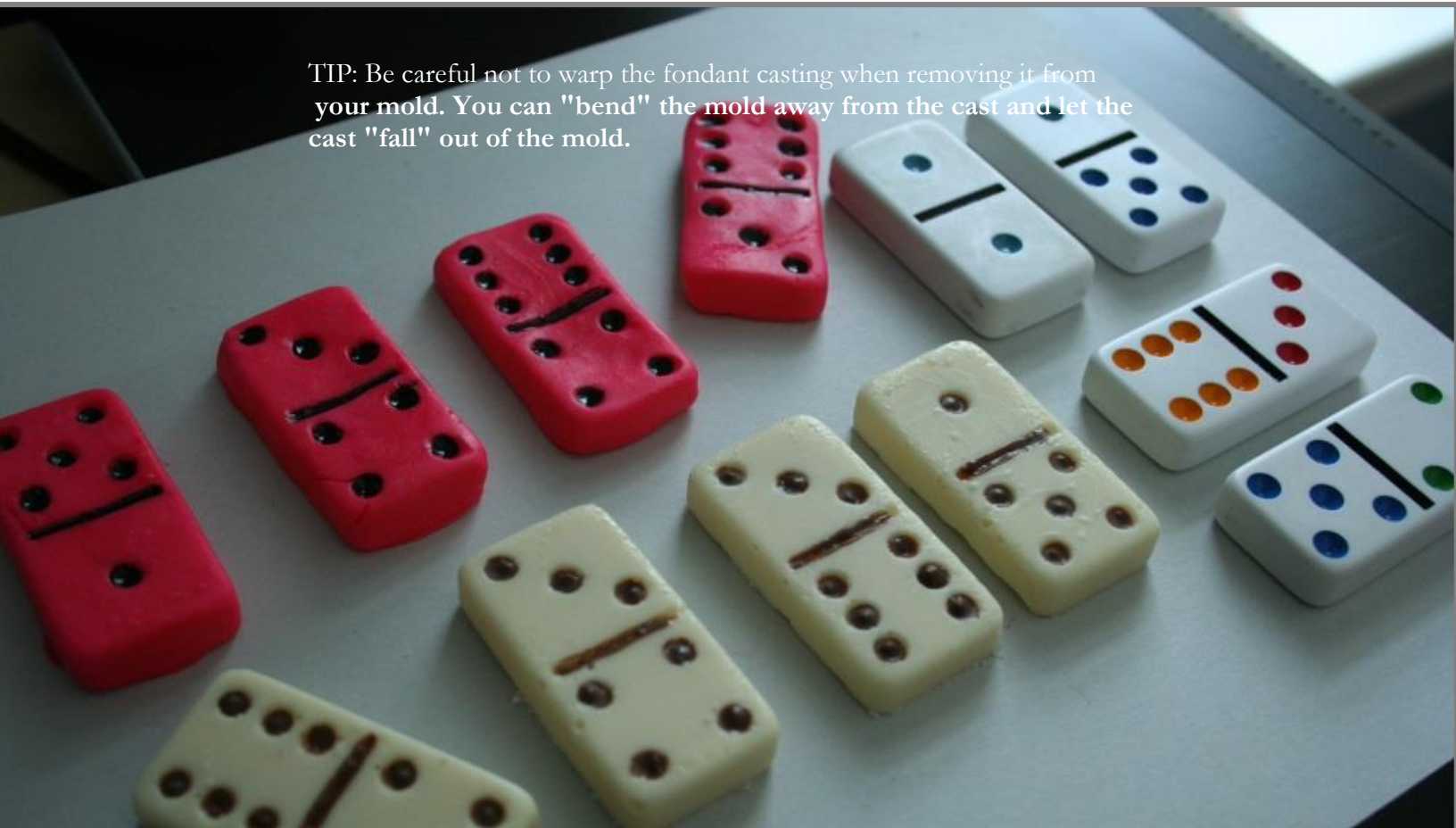
TRY MAKING FONDANT CASTINGS IN A COMPOSIMOLD:

You can easily create a cast in your mold with fondant or gum paste too! This can be done by using the "push mold" technique. Once your ComposiMold has cooled back to original rubbery consistency, remove your original part and simply press the fondant or gum paste into the mold.



You can also use a "2 part mold" technique and press a ball of fondant in between the two portions of your mold. Coloring can be added to the fondant before or after you make your cast.

TIP: Be careful not to warp the fondant casting when removing it from your mold. You can "bend" the mold away from the cast and let the cast "fall" out of the mold.



Antique Santa Mold from a Plaster Cast

We used this plaster cast from an antique Chocolate Santa Mold to recreate a usable mold to make chocolates as holiday gifts.



PROCESS FOR CREATING A MOLD FROM A PLASTER CAST:

1. Seal the plaster with a polyurethane sealant and allow it to dry. This will ensure that any air trapped in the plaster won't escape into your CompositMold and form bubbles on your part.
2. Apply silicone mold release over your entire part. Then spray plenty of Bubble Buster over the Mold Release to reduce bubble formation.
3. Melt and pour your CompositMold over the plaster cast.



4. Let the CompositMold solidify.

5. Melt chocolate and pour into the mold. Let it solidify and carefully de-mold.

6. Wrap the chocolate cast in decorative foil for a professional look.



Chocolate Dish with ComposiMold-FC



SUPPLIES:

- ComposiMold-FC (food contact)
- Dish you choose to duplicate in chocolate
- Olive oil
- Utility knife and sharp clean blade
- Chocolate

INSTRUCTIONS:

Choose a dish (your master) that is fairly uniform from bottom to top and that has thick enough walls to hold up in chocolate.

1. Place this master, bottom side down, into your mold box that can withstand the heat of the melted ComposiMold.
2. Spray your master and your mold form with a Vegetable Oil Mold Release.
3. Melt your ComposiMold per product directions.
4. Pour over your master. Make sure the ComposiMold covers your master by at least 1/2".
5. Let your mold cool per product directions. It will cool faster in the refrigerator.
6. Carefully remove your cooled mold from the mold box.

MAKE YOUR OWN MOLDS AND CASTS

7. You may need to cut away a thin layer of ComposiMold lining the bottom of the master.



8. De-mold your master by pulling it through this hole or you can also make a slice down the side of your mold and pull your master out that way.
9. Spray the inside of your mold with Vegetable Oil Mold Release and tape your slice shut if you made one in the last step.
10. Melt your chocolate and pour it into the mold. (A squeeze bottle works great here as well as popsicle sticks to “push” chocolate into any tight spaces.)
11. Let your chocolate harden per product directions.



12. De-mold your chocolate cast by pulling it through the hole at the bottom or un-tape the slice in the mold and pull it out this way.
13. Fill your edible chocolate dish with your favorite dessert and enjoy.

Yummy Hollow Chocolates

This chapter walks you through the step-by-step process of making hollow chocolates. These delicate treats could become the centerpiece of your next sweet creation.

STEP BY STEP: MOLD FOR HOLLOW CHOCOLATE CASTING

The process of making a thin layer of chocolate coatings on the surface of the mold can be used to create dazzling shapes that remain hollow or you can examine the possibilities of adding interesting fillings.

The process of making the molds remains the same: melt the ComposiMold-FC, pour over your master, and let solidify.

When it comes to filling the mold, keep the ComposiMold-FC at room temperature. Pour the chocolate into the mold and rotate and spin the mold around until all the crevices are filled and the sides are coated. You will likely need 2 or 3 layers of chocolate. For strength of the chocolate castings, it is better to be a little thicker.

Two part molds also work well with hollow parts. After you have coated the inside of the molds, carefully peel the ComposiMold-FC mold away from the chocolates.

STEP BY STEP: HOLLOW TWO PART MOLDS

This advanced process allows you to make a hollow part without any sprue hole by placing the chocolate inside of one of the mold cavities prior to putting the mold together.

Melt Chocolate and pour into one half

Take either one of the matching mold pieces and fill completely with chocolate [flush to the edge].

Assemble mold halves

While the chocolate in the first piece is still liquid, place the opposite (matching) piece so the halves line up together. Attach together with tape or rubber bands.

Finish making the hollow mold

Flip, rotate, and spin the assembled and combined mold shake to distribute the chocolate evenly around the surface of both mold halves.

Cool: Place the 2 part mold in the freezer. After it partially sets, rotate the mold to assure even distribution of chocolate as the chocolate will tend to collect at the bottom until completely solidified. Thicker areas of chocolate will take longer to cool. For smaller chocolate castings of around 1 ounce, allow around 5 to 10 minutes to cool, with rotation occurring every minute or two. Larger molds of up to a pound of chocolate will require more time to cool.

MAKE YOUR OWN MOLDS AND CASTS

Remove candy and touch up if needed: When the chocolate is completely solidified, separate the two mold halves. Where the two mold halves connect, there may be some flashing or extra chocolate. Use a small knife to touch up the chocolates surface if necessary.

CUSTOMER PROJECT: Shadowguard Kennels,

Chocolate bullmastiffs for an Easter Club Show



White Chocolate Action Figure; *The Thing*



With practice, you can continue to make more exciting and fun castings with chocolate. Your favorite action figures make great chocolate cake toppers or cupcake toppers! One of our creative customers used a retiring police officer's actual gun and badge to make a mold that was used to cast chocolate duplicates for his retirement cake!

WHEN USING CHOCOLATE CASTING MATERIALS, BE SURE TO USE COMPOSIMOLD-FC (food contact version). IT IS NOT SAFE TO USE A MOLD FOR FOOD ITEMS THAT WAS ONCE USED TO CAST RESIN MATERIALS. THAT WOULD BE DANGEROUS TO YOUR HEALTH!

1. To make the mold, we placed the plastic toy in a bucket and poured ComposiMold over him. We poured the ComposiMold in intervals to help attach him to the bottom, so he would not float. Approximately 1 inch of ComposiMold was poured into the bucket, and after that solidified, the rest of the ComposiMold-FC was poured over that.



2 After the ComposiMold mold solidified, we used a razor blade to cut down the sides. We tried to keep the parting line along the edge of the Thing. We also cut a line above the head to ensure that we could remove the head from the mold after the chocolate is poured into the mold.

MAKE YOUR OWN MOLDS AND CASTS

3. To make sure the mold is filled, each half of the two part mold is coated with the white chocolate before putting the halves together. All the crevices are filled and the chocolate is tapped gently to eliminate any bubbles. The two halves were taped shut after being filled with the white chocolate.



4. A little extra white chocolate was placed into the feet of the mold to ensure that it is completely filled. After filled, the action hero was placed in the freezer to cool. The freezer also makes the chocolate harder, so it can be removed without breaking easier.



5. After completely solidifying, we removed one half of the mold. The mold is pulled away from the chocolate carefully to reduce the chances of the chocolate from breaking.



MAKE YOUR OWN MOLDS AND CASTS

6. If trouble strikes and a leg breaks off while removing the white chocolate action figure from the mold, the chocolate can be re-melted to stick it back together. Use a hot air gun to slightly melt the leg, and hold the two halves together to let them solidify the two parts back together!

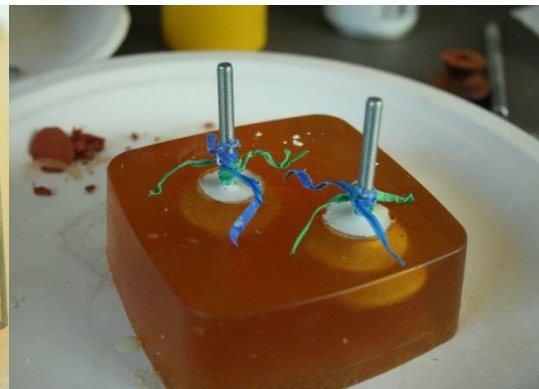
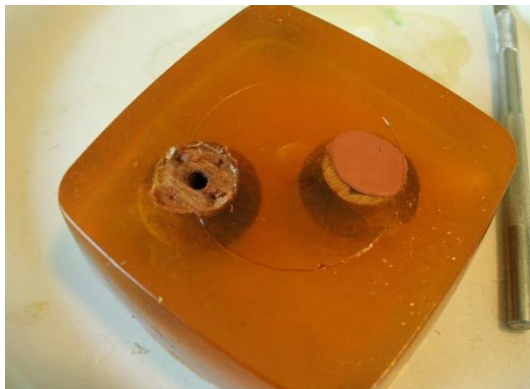


Drawer Knobs in Plaster to Match Your Style

Plaster or Plaster of Paris is a great casting material because it is so inexpensive and works great with ComposiMold. Plaster is a safe, low cost medium that will reproduce fine detail. You can use Hydrocal, Hydrostone, Ultracal.. This project shows you how to make duplicates of drawer knobs so you can cast them in plaster and paint them to have a more personalized look for any piece of furniture in your home.



1. Unscrew the knobs you'd like to duplicate and attach them to the bottom of your mold box with clay or hot glue. Spray them with Mold Release and Bubble Buster.
2. Pour melted ComposiMold into the mold box and let it solidify.



3. Pull your mold out of the mold box and pull the clay off of the bottom of the knob. You may want to use an exacto knife to cut a clean circle to pour your plaster into.
4. You can purchase identical long bolts to the ones that were used in the piece you are molding. You can use twist ties to act as "kick-stands" to hold them straight up and down into the plaster. They also kept the bolt about 1/4" away from the front of the casting.

TIP: Mix Plaster thicker than you'd expect. 70 Parts powder to 30 Part Water by weight or volume.



5. Let the plaster solidify overnight and then carefully remove them from the mold. Now they are ready to paint to match your aesthetics. Spray the finished drawer knob with a shine glaze to give it a ceramic feel.

TIPS FOR SUCCESSFUL PLASTER CASTINGS

The steps involved with making a plaster casting with ComposiMold are the following:

1. Prepare your original part. Apply a mold release and place it into a container that can hold the ComposiMold.



2. Melt the ComposiMold
3. Pour the ComposiMold over your original and let it solidify
4. Separate the original from the ComposiMold mold
5. Apply a mold release to the ComposiMold mold
6. **Mix your plaster by using a ratio of 70 parts plaster to 30 parts water when mixing. The more plaster in the water, the stronger the plaster will be when solidified.**
7. Pour the plaster into your ComposiMold Mold
8. Try to wait patiently as it cures.



9. Separate your cast part from the ComposiMold mold and admire your work.

Piggy Napkin Ring; 2 Part Mold (Cut Block)

Two part molds are a little more complicated, but still pretty easy with CompositiMold. We will use a relatively complicated pig napkin holder sculpture to show you the process.



This pig is complicated because:

- The pig has undercuts around the ears and a hole around the tail.
- The pig has a hole through its belly to hold the napkin.

Because CompositiMold is a clear resin that you can cut, we will just pour it over the part, allow the CompositiMold to cool, and cut the

mold in half. Sounds easy, and for the most part it is. You will still have to worry about where to make the parting line and keeping the part together while casting the new piece. Although, the molds described are in two parts, there is no reason why more complex molds with three or pieces cannot be made using the same techniques.

1. Pour approximately a ½ inch of CompositiMold into a plastic container and let it solidify. On top of the layer of CompositiMold, place the pig and pour more CompositiMold around the pig until the pig is almost covered. This CompositiMold holds the pig in place after the CompositiMold solidifies.
2. Add a small wedge of clay to the back end of the pig. This wedge of clay is the sprue. After the mold is solidified, this sprue will be removed to provide a way to pour the resin/plaster into the pig. You could cut a hole after, but in many situations it is easier to put a sprue in as the mold is being made. The location of the sprue is selected so that the hole is at the highest point in the mold while pouring in the resin/plaster.

TIP: In more complex molds you will need to add vent holes so air can escape and not be trapped in the part. To add the vent holes after the CompositiMold mold is made, cut a small hole. The hole should be placed to allow a way for air bubbles to float to the top and escape without being trapped in your mold.



3. After this ComposiMold solidifies, pour additional ComposiMold over the pig to about 1/2 inch to cover the pig.



4. After the ComposiMold has completely solidified, remove the container. Use a knife or razor blade to carefully cut the mold down one side and half way across the bottom, on a line that will facilitate easy removal of the model. There is no need to completely separate the part into two pieces as shown below, but you can. By keeping the mold together, the mold will remain aligned.

5. Remove the model from the mold. The ComposiMold will bend away from the part. Because of the hole in the pig, the ComposiMold filling the hole must also be cut. Where you cut does not matter as long as the two halves align when the mold is put back together.



6. Spray on the mold release. Wipe off any excess mold release with a paper towel or paint brush.



7. Use two pieces of wood or other solid surface with a clamp to hold the mold together.



8. Mix the Plaster and pour into the mold. A funnel was used to pour the plaster into the mold. Gently vibrate the mold with your hand by tapping the sides of the mold to insure that all the cavities are filled and entrapped air can escape.



9. After the plaster has cured, separate the mold gently. Be especially careful with the center hole.



10. Break off the plaster from the sprue. This slue or wedge is where the plaster was poured into the mold. The plaster can be smoothed with your finger.



11. To clean the casting, use a sponge or cloth and remove the mold seams from the piece. Be careful not to gouge the part.

SPRUE: A sprue is the opening in the mold where you pour in the casting material. Sprues are also added into the mold in locations where air would be entrapped into the casting. The sprues provide a way for the entrapped air to escape.

Strawberry Handle; Brush-On Technique

Another method of making molds is to paint on the ComposiMold directly on to the model. The paint-on (or brush-on) mold method allows you to mold over parts that you cannot put into a container (such as something on a wall) or that have undercuts that may be difficult to cover when pouring.

Some one-piece paint-on molds can be peeled off like a sock. More complex molds can be made by painting on the mold material and then cutting it off. It may also be helpful to add a backing to your paint-on mold to provide increased support.

The paint-on process is useful with a silicone or polyurethane paint-on material. In many instances, a mold that has more longevity is desired if you are planning to make large number of castings from the same mold. By painting on the silicone or polyurethane paint-on material and then backing it up with ComposiMold, the part can be made for lower cost and still provide the longevity of a silicone or polyurethane mold.

In the example, a knife handle is molded by painting on the ComposiMold. The ComposiMold works well for this application because it cools quickly when in small amounts and the mold thickness can be built up quickly.

First the original master is coated with a mold release. Cooking spray is used on the knife handle shown below.

1. Melt the ComposiMold.
Use a paint brush to paint a layer of ComposiMold over the master. The first layer is generally known as the “detail coat,” and is applied thinly to the model surface with short, dabbing strokes. Subsequent coats can be applied with more fluid strokes and will give the mold strength and durability. The layers are built up over the part.



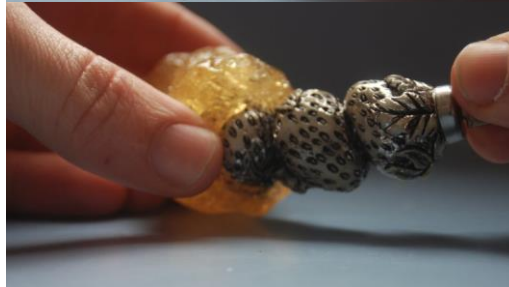
2. Build up approximately a $\frac{1}{4}$ inch of ComposiMold. The part solidifies as the ComposiMold cools.



3. Peel the ComposiMold off of the paint brush after it has solidified to help with cleanup.



4. After the ComposiMold cools, peel the mold off of the master part. Mold release is added to the mold. Pour the casting resin into the mold to make a duplicate of the knife handle.



5. Allow the resin to solidify then, pull the duplicated part out of the ComposiMold and admire. Food coloring was added to the casting material to make it pink.



Action Figure; 2 Part Mold (Poured Block)

In many cases, it is best to prepare the mold in two parts. This may be because there may be specific undercuts that you need to mold around, you want to make a parting line that is not straight, or you want a three part mold.



The following is an example of a two part, poured block mold using a soldier figurine. This figure has several parts that make it a relatively complex model:

- Dramatic undercuts under the head and arms
- Hole within the body and platform
- Thin, delicate arms
- Areas that are difficult to fill because there is no way for the air to escape when the mold is filled with the casting material



Place the figurine into a container. Use clay or polymer clay to build up around the figurine. Build up the area to the point where you want the parting line in the mold. This parting line is selected to allow the mold to be separated easily.



After the clay is completed, lightly cover the model soldier and clay with a mold release. Pour CompositMold over the figurine and clay to make the first half of your mold.



When the ComposiMold has solidified, pull off the first half of the mold, pull the figurine out of the clay and clean off the clay.



Pour melted ComposiMold over the figurine and cured ComposiMold to make the second half of the mold. Let solidify.



Add more mold release to the mold if necessary. Place the two ComposiMold mold halves together. You can use many different methods to hold the two halves together including: tape wrapped around the molds, two pieces of wood and a clamp, or string.



Put the ComposiMold mold into your container with the figurine in this mold. Cover the ComposiMold and figurine with mold release again. Petroleum jelly over the ComposiMold may provide a better separation between the two halves.



After the second ComposiMold half has solidified, pull it off of the figurine. Pull out the figurine from the mold. You are now ready to make your casting.



For this mold, polyurethane resin is used for the casting material. The polyurethane resin is mixed and poured into the mold. Let the resin cure. De-mold and admire your work!

Figurines

A figurine is a statuette that represents a human, deity, or animal. Figurines may be realistic or iconic. In this tutorial we will describe how to make a plastic copy of your figurine using ComposiMold. These steps will also work with Plaster, concrete, and many other moldable materials. The first step for making a duplicate figurine is to make your own figurine. For your first duplicate figurine, I recommend a non-complex part that does not have large undercuts or holes that go directly through.

SIMPLE FIGURINE MOLD

An example of a simple dog figurine is displayed below. Molding this dog figurine is very simple.

1. Place the dog figurine into a container that can hold the ComposiMold
2. Spray your part with Bubble Buster
3. Melt and pour ComposiMold over the part
4. Let the ComposiMold solidify (placing it in the refrigerator will reduce the time)
5. Take out original figurine.
6. Spray the inside of the mold with mold release and let it dry.
7. Pour resin into mold cavity. The type of resin you use is up to you. This dog figurine has been made with many different casting materials including plaster, polyurethane, epoxy, and Cement.
8. When cured, pull out figurine. You can make many parts from this one mold. And when you are finished, the ComposiMold can be re-melted to make other molds if you like.



MORE COMPLEX FIGURINE MOLDS

A more complex mold has more undercuts. Below is a duplicate of the Smurf-Hater, Gargamel. This figurine shape is more complex because of the undercuts along the hands, his nose, and arms. Because of the undercuts, I used a mold release to ensure that the parts would separate easily. And then, just like the simple mold, I placed it in a container, poured the melted ComposiMold over the figurine, and let it solidify.

With the ComposiMold mold of the figurine solidified, the more complex figurine mold needs to be cut into 2 parts. Use a sharp knife or razor blade to cut along the edge of the figurine. If you move off the edge, it is not a problem, but it helps to make the mold separate easier. When completed you should have a two part mold and the original figurine out of the ComposiMold.

MAKE YOUR OWN MOLDS AND CASTS

To mold, place the two part mold together and hold them together. I used duct tape to wrap around the ComposiMold mold. Be sure the molds are held together well. Then pour resin into the mold cavity being sure the air pockets are gone. You may have to rotate the mold or add holes to the mold to allow the air to escape. After the resin has cured, remove the figurine from the mold and remove any small burrs.



Make Your Own Action Figure

This tutorial will walk you through the steps of creating your own "Frankenstein" action figure fashioned from molds and casts from four different characters.

The instructions below will teach you how you can create a unique action figure by making molds of your existing gang. ComposiMold makes this easy by allowing you

to make a mold of one action figure's head and then re-melt to create a mold of another action figure's legs and so on.



Keep in mind that oil based paints are the best choice when painting polyurethane resin. They will adhere better to the urethane and will hold during rough play should your action figure see battle in his future.

Follow this tutorial to create your own “Frankenstein” action figure:



To use the head of this action figure turn him upside down and tape his feet. The top of his head has to be at least $\frac{1}{2}$ " away from the bottom of the cup.



Choose another character whose legs you'll use. Tape him in place, keeping his feet planted in the center of the cup.



Here is a shot of the mold after it solidified. You can see that the CompoMold was only poured to his shoulders.



This is the underside of the legs mold. The mold was cut open like a book and taped back together to pour the urethane. Seal the bottom (which was his waist) with clay to keep the urethane from spilling out.



Here are the urethane castings that will be reassembled to make the new unique action figure.



Start to reassemble the parts to make the action figure. 2-Part Epoxy is a great adhesive to use so your parts will stay together over time.



Paint the urethane parts with an oil-based paint to make it look cohesive.



As you can see here, the new action figure fits right in and you'll still have all your characters intact (except Batman).



ComposiStone From a Wood Carving

You can make very successful molds of wooden objects with ComposiMold. All you need to do is coat the wood with a shellac spray sealant to coat the wood first. This ensures that you don't have air bubbles escaping from the porous material into your mold.

SUPPLIES:

ComposiMold
Shellac Spray
Wood Carving as Master Object to Mold
Vegetable Oil Mold Release
ComposiStone
Water
Mixing Cups and Stir Sticks
Microwave or Double Boiler

STEP BY STEP INSTRUCTIONS:



Learn the easiest method for duplicating your wood carvings!

Prepare your wooden carving

Shellac or any appropriate sealant can be applied to the carving. Once the sealant has dried the carving should be glued to the bottom of a mold box/container to prevent it from floating. Then coat the carving with a very light coat of mold release, if excessive amounts are used wipe away the extra.



Create your mold

Melt the ComposiMold in a microwave, double boiler, chocolate melter or any other method that does not allow the ComposiMold to be in direct contact with temperatures exceeding 200°F. Once the ComposiMold has melted, spray your carving with a medium coat mold release and then Bubble Buster and pour the ComposiMold while the Bubble Buster is still wet.



Prepare your mold

Once the mold has cooled and feels like rubber cut down one side and stretch the mold so you can pull the carving out. Once the carving is removed seal up the cut

MAKE YOUR OWN MOLDS AND CASTS

with tape. Now spray the inside of the mold with a very light coat of mold release (cooking oil will work).

Prepare and pour your casting material

Use a mix ratio of one part water to two parts CompositStone. Next force the CompositStone down the legs using a syringe or just vibrating the mold. Once the mold is full tap the mold until the CompositStone smooth's itself out.



Remove the model and enjoy!

Remove the CompositStone model from the mold approximately two hours after pouring. Then paint and enjoy your new creation!



Concrete Garden Tile

Concrete isn't just for house foundations anymore! In this project we've used concrete as a casting material to make a delicate tile to be used as a decorative accent in a plant pot or small garden



SUPPLIES:

- ComposiMold
- Bubble Buster
- Hot glue
- Water
- Stir sticks
- Silicone Mold Release
- A wooden detail as master
- QuickCrete brand concrete
- Dish to mix concrete in
- Gloves

1. Hot glue your master object down into a container that can withstand the heat of the melted ComposiMold.
2. Apply a Silicone Mold Release to the object and the mold box.
3. Apply Bubble Buster to reduce surface tension and bubble formation when making your mold.

Concrete Garden Tile cont.

4. Pour melted ComposiMold over master object.
5. Let ComposiMold solidify back to its original rubbery consistency.
6. Pull the master object out of your mold.
7. Spray Silicone Mold Release into the mold.
8. Mix concrete per product instructions. The proper consistency is wet enough to be able to press it into the ComposiMold but overall much drier than you'd originally think it should be. This ensures that your cast will be strong enough. A mix that has too much water will be very weak.
9. Let the concrete harden per product instructions. The 3inch garden tile cured in the mold for 24 hours to be sure it wouldn't break.

Enjoy your own concrete tile made from a wooden object you picked up at the hardware store!

CUSTOMER PROJECT:

Karen, Egg Carton Paper Mache Gargoyle
Pedestal Embellishments
(Made to look like concrete)

Dog Garden Sculpture in Concrete



VIDEO LINK:
[Dog Garden Sculpture in Concrete](https://youtu.be/OkR9t7Os6l8)
<https://youtu.be/OkR9t7Os6l8>

The follow describes the process for using concrete as a casting material in ComposiMold. The type of concrete and how the concrete is mixed makes a large difference in the final product and how it will react with the ComposiMold.

CONCRETE DOG SCULPTURE:

This concrete dog used approximately \$2 worth of concrete. We used Quickcrete from the local hardware store. And with ComposiMold, you do not need to purchase new mold making material to make a new unique mold so after your first purchase, you do not need to buy any more mold making materials.

1. The original dog master was hollow and would float in the ComposiMold. To stop this from occurring, we drilled a hole and poured in sand. This sand weighed down the dog master and helped hold the dog down as the ComposiMold was poured over the top. But first Bubble Buster is sprayed over the master to reduce bubble formation.
2. Approximately 40 pounds of ComposiMold was used for this mold. It was melted in a double boiler.
3. A plastic trash bag was used as a liner in a 5 gallon bucket. This 5 gallon bucket is the same bucket that the 25 pounds of ComposiMold comes in. The plastic bag allows the mold to slide right out without sticking to the bucket.
4. After the mold is poured, let the ComposiMold cool to solidify.



5. The mold was sliced down one side to enable the dog master to be pulled free. To cast, this slice was taped up with packaging tape. Mold release is sprayed into the mold cavity.
6. Mix the Concrete as described on the package and pour/scoop it into the ComposiMold dog mold.
7. Pound and shake the mold to fill in all the voids and to get the concrete to settle.
8. After the mold is filled, wait for the concrete to solidify. Wait at least a day. Two is better.
9. When cured, pull away the tape that was holding the mold halves together, split the mold and remove your new dog casting.
10. Carefully pull the ComposiMold away from the casting. After you have removed the casting, let the concrete dog cure over several more days to weeks. This will give the concrete time to become stronger.
11. Admire, enjoy. And when you are finished, make a new unique mold by re-melting the ComposiMold. What will you make next?

MOLD RELEASES:
Molds releases that work with concrete include:

- Vegetable Oil (Pam Spray is nice)
- Mineral Oil
- Petroleum Jelly
 - Soap
 - Motor Oil
 - Spray Lubricants (WD40, ArmorAll)



Stepping Stones in Concrete

Making Concrete Stepping Stones with ComposiMold is similar to making most molds and casting with ComposiMold. The process starts by making a mold from your original casting. In these examples, we show you a butterfly stepping stone and also a dragonfly stepping stone. We made the dragonfly stepping stone first, then we re-melted the ComposiMold and made the butterfly.



The original dragonfly stepping stone was broken so we first held the pieces together with polymer clay before making our mold. We used aluminum foil as our mold box so we could form it right around the stepping stones.



Use a bit of Bubble Buster on the original to reduce bubble formation. Also, vegetable oil as a mold release stopped the aluminum foil from sticking to

MAKE YOUR OWN MOLDS AND CASTS

the ComposiMold. The ComposiMold was melted in the microwave. These molds used about 3 pounds of ComposiMold each.

For the concrete, we used a sand/cement mixture. Keep the concrete as dry as possible for the best strength. We also used a small amount of acrylic fortifier to improve strength for the thin concrete casting.

Vibrate or shake the mold a bit to get the concrete to settle. Spread the concrete into all the crevices. The hardest part is waiting for the concrete to cure. 24 hours minimum before de-molding and before you walk on it give it at least a week to fully harden.



After your first casting, wipe your ComposiMold mold with vegetable oil to keep it moist. Clean with a paper towel. You can use a cold water to wash away any extra concrete. Dry the mold as soon as you are finished.

Enjoy your stepping stones! When finished, re-melt the ComposiMold and start making your creative garden sculptures!

ImPRESSive Putty for Halloween Mask

Often times, the object you want to use as your master object, is something that cannot be moved to a mold box. ImPRESSive Putty is the perfect choice for this kind of project because you can easily press the Putty onto the object, in place!

SUPPLIES:

ImPRESSive Putty, Activator, and Microwave Safe Bag
Microwave
Silicone Rubber as Casting Material
Concrete Garden Troll as Master



STEP BY STEP INSTRUCTIONS:

Add 2 drops of Activator to the Microwave safe bag for every 1 ounce of ImPRESSive Putty. Microwave the Putty and Activator in the sealed bag for amount of time suggested below.

| Size | Microwave times (estimates-times will vary) |
|-------|---|
| 3oz. | 10 second intervals until melted |
| 6oz. | 15 second intervals until melted |
| 16oz. | 30 second intervals until melted |

Let the Putty cool to a temperature comfortable to the touch before removing from the bag (115F or less.)

Smooth the putty to remove any lines and make into a shape large enough to cover the face of the concrete troll. Carefully press the Putty onto the concrete face, being sure to press into all the most detailed areas.



Let the ImPRESSive Putty solidify. The master object is ready to be removed from the mold when the putty does not deform when pressed with your finger.

Remove the ImPRESSive Putty mold from the troll's face by slightly bending it away from the concrete. Now your mold is ready for your casting material.

Mix the silicone per manufacturer's instructions and fill the inside of the mold. Let cure.

Once the silicone has cured and is ready to be removed, simply peel it out of the ImPRESSive Putty mold. Cut eye holes and attach an elastic string behind the ears so it will stay on your little troll/superhero/muscle man.

Repeat the casting process until you have as many masks as you want, and enjoy!



Don't Forget, With ImPRESSive Putty you can remelt your mold to make many more molds!

Lobster Claw; Cast with Urethane Resin

Two part molds are a little more complicated, but still pretty easy with ComposiMold. We will use a real lobster claw as our original piece and we will mold it with the urethane resin. You can also use the Clear Casting Plastic. This part is made as a two part mold to allow details from both sides of the part.

VIDEO LINK:
[Lobster Claw; Cast with Urethane Resin](https://youtu.be/SThESxvCDMg)
<https://youtu.be/SThESxvCDMg>

Because ComposiMold is a clear thermoplastic resin that you can cut, we will just pour it over the part, allow the ComposiMold to cool, and cut the mold in half. Sounds easy, and for the most part it is. You will still have to worry about where to make the parting line and keeping the part together while casting the new piece.

1. The lobster claw was filled with sand and polymer clay (Sculpey or Fimo work well) was used on the base. Spray with a mold release. A mixture of white glue and water is used for the mold release between the ComposiMold and the lobster claw. This mixture of white glue and water is a simple method to reduce bubble formation.



2. Place the original master solidly into a cup. The cup is used as the mold box.



3. You will need a sprue to allow the resin to pour in the resin. After the mold is solidified, the sprue will be removed to provide a way to pour the resin/plaster into the lobster claw. The polymer clay placed on the bottom of the claw to keep the claw standing will be used as the sprue. **The location of the sprue is selected so that the hole is at the highest point in the mold while pouring in the resin.**

MAKE YOUR OWN MOLDS AND CASTS

4. In more complex molds you will need to add vent holes so air can escape and not be trapped in the part. To add the vent holes after the ComposiMold mold is made, cut a small hole. The hole should be placed to allow a way for air bubbles to float to the top and escape without being trapped in your mold.

5. Spray the container with mold release and the part with Bubble Buster. Melt the ComposiMold and pour over and around the lobster claw.



6. This part took approximately three hours to cool at room temperature. The process could have been speeded up by placing the part in the refrigerator or cooler. After the ComposiMold has completely solidified, remove the lobster claw from the mold box. Use a knife or razor blade to carefully cut the mold down one side and half way across the bottom, on a line that will facilitate easy removal of the model. This line is called the parting line. There is no need to completely separate the part into two pieces, but you can. By keeping the mold together, the mold will remain aligned.



IDEA:

Although, the mold described in this tutorial is in two parts, there is no reason why more complex molds cannot be made with three or more parts using the same techniques.

MAKE YOUR OWN MOLDS AND CASTS

7. Remove the model from the mold. The ComposiMold will bend away from the part. Where you cut does not matter as long as the two halves align when the mold is put back together.
8. Spray the inside of mold with the mold release. Wipe off any excess mold release with a paper towel or paint brush and let it dry. Use tape to wrap around the mold and hold the two parts together. Any tape will work. For this part, a packaging tape was used. For flat pieces molds, you may find it more useful to use pieces of wood to hold the two mold halves together.
9. If necessary, cool the mold so it is cold prior to pouring in the resin. This is sometimes necessary for the larger castings or castings with high temperature urethane resins.
10. Mix the resin together. Stir the equal parts of part 1 and 2 together to ensure even mixing.

11. Pour the resin into the ComposiMold mold. If necessary, tap the sides to remove any bubbles. Let the resin cure.



12. After the resin has cured, separate the mold gently. Pull the tape off and pull the ComposiMold mold making material away from the casting.
13. Clean up the casting by removing any edges, break/cut off the sprue, and polishing any areas that are rough.
14. When finished, admire your work. The ComposiMold mold can be used for new castings or re-melted to make other molds.

MAKE YOUR OWN MOLDS AND CASTS

CUSTOMER
VIDEO LINK:
[Rapid Prototyping
with
ComposiMold,
Fairy Door](https://youtu.be/FMYQRpJWq30)
[https://youtu.
be/FMYQRpJ
Wq30](https://youtu.be/FMYQRpJWq30)



CUSTOMER PROJECT:
Dalton, Fairy Door



CUSTOMER PROJECT:
Plaques with Funny Messages, by Tim and Trish

Jewelry Designs with ComposiMold

ComposiMold is a simple tool to allow you to take your jewelry making to the next level. You could create a prototype of a new design, create duplicates of a specific element of your design, or turn a clay sculpture into a durable poly-resin art piece. It's simple, fast, and repeatable. With ComposiMold mold making materials, you are able to make as many unique molds as you want.

MAKING A COMPOSIMOLD MOLD:

Follow the basic instructions in our *How To make A Basic ComposiMold* chapter to make a mold with ComposiMold. The ideas below could inspire your next jewelry project with ComposiMold.



DESIGN IDEAS FOR CUSTOMIZED JEWELRY WITH COMPOSIMOLD:

Below are a few projects created by our own ComposiMold Team and our awesome customers too!

- One of our customers proposed to his girlfriend with a chocolate engagement ring he made with ComposiMold!
- A creative customer of ours is selling plastic gummy bear earrings on her Etsy shop!
- You could replace a lost earring by making a mold of the one you still have.
- Try making specialized beads with polymer clay and then duplicating them in a ComposiMold.
- Duplicate your own unique designs to sell at craft shows or on Etsy too!



Animal Shaped Soaps Scented with Essential oils



Why have rectangular shaped soap when you can have unique custom-made shapes? You could create your own special design for party and wedding favors, to inspire a child who hates tub-time, or to impress your family members during gift giving season! With ComposiMold, mold making materials, you can make soaps in all kinds of shapes. Try one shape and reuse the material to try another.



Create your mold by following the instructions in our *How to Make a Basic ComposiMold* chapter. Then put your mold into the freezer for a couple hours.



Melt the soap per product instructions. At this you can add a few drops of food coloring and an essential oil for color and scent.



Pour your melted soaps into your cooled mold and put the mold back in the freezer to solidify.



This photo shows the soaps after they were de-molded and my mold ready for the next round of casts.

MAKE YOUR OWN MOLDS AND CASTS

THE KEYS TO SUCCESSFUL SOAP CASTS IN A COMPOSIMOLD:

The key to great soap casting in a ComposiMold is chilling the mold before and after pouring in the soap. The ComposiMold has a lower melting point than the soap so as long as the soap cools at a faster rate than the ComposiMold melts, your mold will remain strong and intact.

DEMOLDING SOAPS FROM THE MOLD:

Carefully peel the mold away from the soap as much as possible so you do not put a lot of pressure on the soap. This will ensure that the cast will not break during this process.

Don't forget: When you have made all the soap casts that you want with one mold, it can be re-melted to make other molds.



CUSTOMER PROJECT:
Michelle, Lavender Scented Shell Soap with Dried Lavender

ImPRESSive Putty for MatchBox Car Soap

Kids love to help! In this ImPRESSive Putty tutorial, a 3.5yr old was able to help make the mold of one of his favorite matchbox cars. The ImPRESSive Putty can easily handle the temperature of the melted glycerin soap and many castings can be made in the same mold.

SUPPLIES NEEDED:

ImPRESSive Putty, Activator, and Microwave Safe Bag
 White Glycerin Soap
 Gel Food Coloring, Electric Blue Color
 Plate
 Refrigerator
 MatchBox Car



STEP BY STEP INSTRUCTIONS:

Add 2 drops of Activator to the Microwave safe bag for every 1ounce of ImPRESSive Putty. Microwave the Putty and Activator in the sealed bag for amount of time suggested below.

| Size | Microwave times (estimates-times will vary) |
|-------|---|
| 3oz. | 10 second intervals until melted |
| 6oz. | 15 second intervals until melted |
| 16oz. | 30 second intervals until melted |

Let the Putty cool to a temperature comfortable to the touch before removing from the bag (115F or less.)

Smooth the putty to remove any lines and make into a shape large enough to cover the matchbox car. I placed the car on a plate first so I could move it to the Refrigerator to cool faster. Press the mound of ImPRESSive Putty onto the car and make sure it's pressed into all the detailed areas, like the tires and edges of the toy.

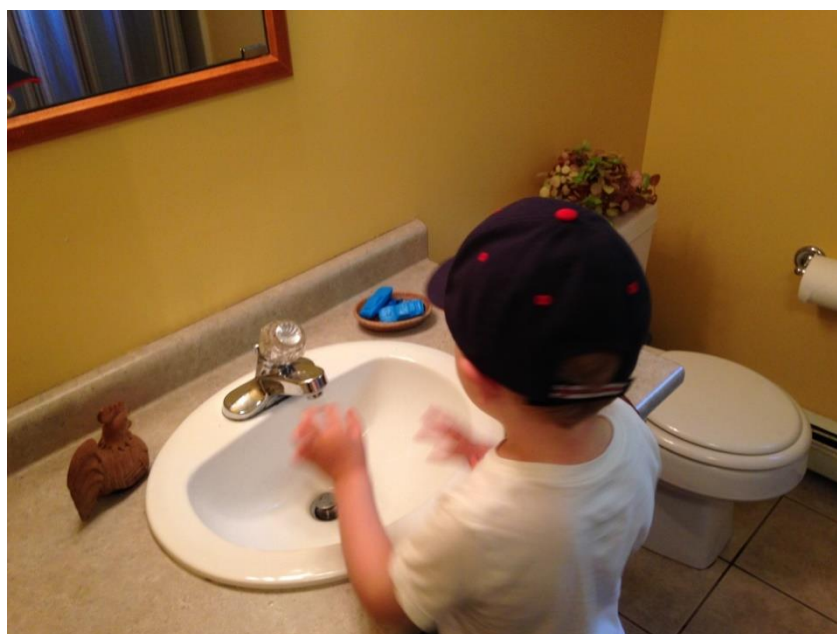
Let the ImPRESSive Putty solidify. The master object is ready to be removed from the mold when the putty does not deform when pressed with your finger.

Remove the matchbox car by slightly bending the mold and pulling the car out. Now your mold is ready for your casting material.

Mix the food coloring into the melted glycerin soap. (Per manufacturer's instructions) Pour into the mold until it is even with the top of the mold and let cool.

Remove the car shaped soap, repeat casting process, and enjoy!

Don't Forget, With ImPRESSive Putty you can remelt your mold to make many more molds!



Candle Making in a ComposiMold

There are plenty of basic candle molds on the market, however if you are trying to create truly unique candle or wax mold designs, then ComposiMold is all you need. With ComposiMold mold making materials, you are able to make as many unique molds as you want.

MAKING A COMPOSIMOLD MOLD:

Follow the instructions in the *How To Make A Basic ComposiMold* chapter to learn how to make a mold with ComposiMold. The tips below will set you up for success when using wax as your casting material.

VIDEO LINK:

[Candle Making in a ComposiMold](https://youtu.be/c3fMITZ8Quk)

<https://youtu.be/c3fMITZ8Quk>



THE KEY TO CREATING SUCCESSFUL WAX CASTINGS IN A COMPOSIMOLD:

The key to creating wax castings in a ComposiMold is chilling the mold. You chill the mold in the freezer for a few hours prior to pouring the hot wax and after to cool the hot wax faster. The ComposiMold has a lower melting point than the wax, but because the wax cools at a faster rate than the ComposiMold heats, the ComposiMold will not melt.

STEP BY STEP INSTRUCTION FOR MAKING A WAX CASTING:

1. Cool your ComposiMold in the freezer for a few hours.
2. Melt your wax per product instructions.
3. Remove Mold from the freezer. (If this cast is going to become a candle, at this step you will set up your wick to hang down into the mold.)
4. Pour the melted wax into your unique wax mold to fill the mold.
5. Cool the wax in the mold by placing in the refrigerator or freezer.
6. De-Mold by peeling the mold away from the wax as much as possible so you don't put a lot of pressure on the wax.
7. Enjoy your one of a kind custom wax castings and candles. Don't forget: When you have made all the wax casts that you want with one mold, it can be re-melted to make other molds.



MAKE YOUR OWN MOLDS AND CASTS



CUSTOMER PROJECT:

Diane, Skull candle made in a ComposiMold



Owl Candle: 2 Part Cut Block Method

Even though this owl figurine is quite tall, you can make this mold just like a relief sculpture. After you make the mold, you can use scissors to cut down the sides to make it easier to remove and to go around any undercuts.

Because ComposiMold is a clear polymer that you can cut, we will just pour it over the part, allow the ComposiMold to cool, and cut the mold in half. Sounds easy, and for the most part it is.

NOTE:

You will still have to decide where to make the parting line and how to keep that cut together while casting the candle. Although the mold described is in two parts, there is no reason why more complex molds with three or more pieces cannot be made using the same techniques.



The original owl was a wood carving, so without securing it to the mold box it would float. Be sure to adhere the owl to the bottom of the container using hot glue.

Coat with mold release and Bubble Buster, and pour on the ComposiMold. Let the ComposiMold cool back to its rubbery consistency.

MAKE YOUR OWN MOLDS AND CASTS

We cut a line down the back of the mold after removing from the mold box to make it easier to remove the candle without causing damage. Do not cut the mold completely in half. Leave a large portion of the mold intact. This will help you line up the mold before making your castings.



Use a strong tape to hold the mold halves together. Poke a hole in the bottom of the mold and feed the wick through. You can tape the other end of wick to a pencil and rest it across the top of the mold to be sure it stays centered in your candle as the wax cools.

Melt and pour the wax and let cool. Untape the mold and remove your one of a kind candle!

Carefully peel the CompositMold mold away from the wax part. The CompositMold can be stretched away from the casting. The candle will be an exact duplicate of the original model.

Admire your work! If you like, cast another candle using the same mold and more Soy Candle Wax as your casting material.



Cool Tool Crayons

There are plenty of basic candle molds on the market, however if you are trying to create truly unique candle or wax mold designs, then ComposiMold is all you need. With ComposiMold mold making materials, you are able to make as many unique molds as you want.



1. Secure the tools to the bottom of your mold box with clay or hot glue. (Note: The clay is fillings the holes in these tools to make the crayons a little stronger.)



2. Apply a mold release to the tools and all surfaces of the mold box. Then spray Bubble Buster over that to reduce bubble formation in your mold.

3. Pour your melted ComposiMold into the lowest part of the mold box and let it rise up and over your tools by at least 1/2inch.



4. Let your ComposiMold cool in back to it's original rubbery consistancy.
5. Remove your tools from your mold.
6. Spray the cavities where the tools had been with a mold release.
7. **Place your mold into the freezer for at least 30 minutes for this small sized mold.**

8. Melt your crayon pieces in a microwavable safe container. Melt similar colors together. For this project only blue colors were melted together then separately only shades of green. (Otherwise you'll end up with a bunch of brown crayons.)



9. Pour your melted crayons into your cooled mold. **Previously cooling the mold will ensure that the heat of this casting material won't melt your mold.**
10. De-mold your crayons and enjoy!



CUSTOMER PROJECT:
Allison, Lego Crayons



**DID YOU
KNOW?**

The key to creating wax castings in a ComposiMold is chilling the mold if your wax is above 130 F.

The ComposiMold has a lower melting point than the wax, but because the wax cools at a faster rate than the ComposiMold heats, the ComposiMold will not melt.

ComposiMold as a Backing Material

One of the initial ways ComposiMold was used was as a backing to paint-on silicones and polyurethane mold making materials. This would allow you to use very little of the silicone mold material and reduce the costs. By using silicone with the ComposiMold you get the benefits of the long lasting mold if needed without



the expenses. High viscosity (brushable) Silicone is painted onto the original part in layers until a suitable thickness is “built up.” This process is similar to the process described in the *Brush-on Mold Tutorial*. Typically, the silicone, polyurethane, or latex layers are put on in one or two layers depending on the silicone.

After a thin layer of the paint-on mold material (silicone, polyurethane, latex, or other) is placed over the sample and

allowed to cure, it is backed by the ComposiMold. ComposiMold is poured around the silicone/model to create a support shell prior to de-molding. The advantage of making a mold by brushing the paint-on mold materials onto the model is that it minimizes the amount of the expensive, one time use rubber that is used, saving you material costs. Also, the mold material allows larger, hotter molds to be made than what is possible with only the ComposiMold.

ComposiMold as a Rubber Casting Material

ComposiMold can also be used as an eco-friendly polymeric casting material too. Customers have used ComposiMold as a rubber to make theater props and fake skin. It is also a great material to use with fillers. A variety of fillers can be used to make an excellent rubber. Food coloring or water based paints can be added to change the color. The addition of fibers into the ComposiMold can improve the strength and stiffness a great deal. Try using ComposiMold as a casting material in a ComposiMold mold. Just be sure to freeze the mold prior to pouring the hot melted ComposiMold in.



Scrapbooking and Mixed Media Projects

ComposiMold is a great tool for any scrapbooking or mixed media kit. It will give you the flexibility to make molds and castings of special or valuable items that you don't want to give up for just one project. You can make duplicates of these items to use as embellishments on a scrapbook page or mixed media collage.



MAKING A COMPOSIMOLD MOLD:

Follow the basic instructions in our *How To make A Basic ComposiMold* chapter to make a mold with ComposiMold. The ideas below could inspire your next scrapbooking or mixed media project with ComposiMold.

DESIGN IDEAS FOR SCRAPBOOKING AND MIXED MEDIA COLLAGE WITH COMPOSIMOLD:

Below are projects ideas to inspire your next project with ComposiMold.

- Use casting materials such as urethane resin, epoxy resin, and acrylics to make very professional looking casts. It's super easy to use and so cool to be able to make your own plastic parts.
- You can make beautiful, one-of-a-kind designs to use for photo corners.
- Make your own low profile frames for scrapbook pages.
- Duplicate a rare coin so you won't have to use the original in your artwork.
- Duplicate your own unique designs to sell!

Picture Frame; Foam Board to Plaster

Here is an example from our blog about how to make a picture frame using foamcore and ComposiMold. You will also see just how convenient it is that ComposiMold is reusable and inexpensive!

ATTEMPT #1: The first foamcore frame was made too thin with one layer of foamcore. The plaster was also mixed too watery. This resulted in a plaster cast that was too thin and fragile especially for weak plaster.

ATTEMPT #2: The second foamcore frame was made with two layers. Tape was applied to all the seams so the melted ComposiMold wouldn't seep in here. This and the appropriate ratio of plaster to water made for a much stronger cast.

**THIS TUTORIAL
DEMONSTRATES
THE BENEFIT
OF
COMPOSIMOLD'S
REUSABILITY!**

Use a ratio of 70 parts plaster to 30 parts water when mixing. The more plaster in the water, the stronger the plaster will be when solidified.



Mark out the width of the frame and carefully cut it with an exacto knife.



Here is the foamcore frame ready to be embellished.



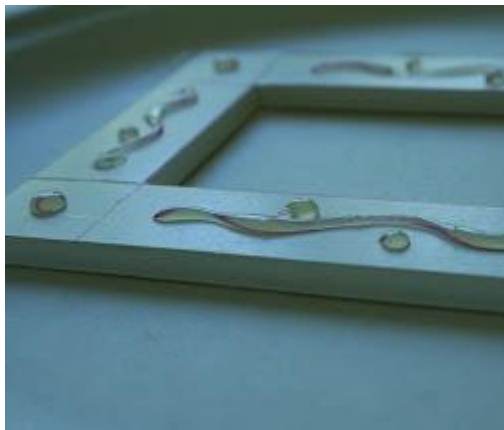
Draw some designs on it to follow with



Then use the hot glue gun to draw on

MAKE YOUR OWN MOLDS AND CASTS

the hot glue gun.



You can see here from the side that the glue is raised and will create a cool texture.

the frame. This will create a 3-dimensional effect.



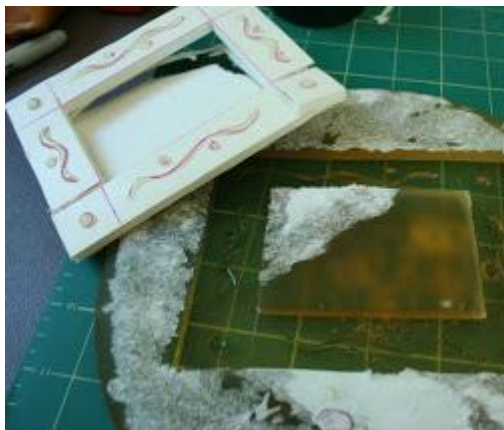
Prepare the frame with plenty of mold release.



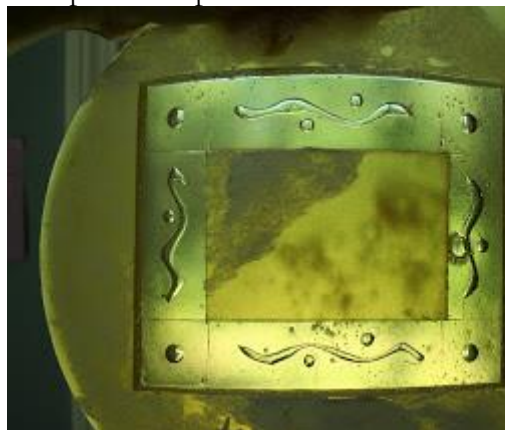
Then spray a layer of Bubble Buster.



Here is shot of the frame with melted CompositMold poured over it.



Then remove the foamcore picture frame.

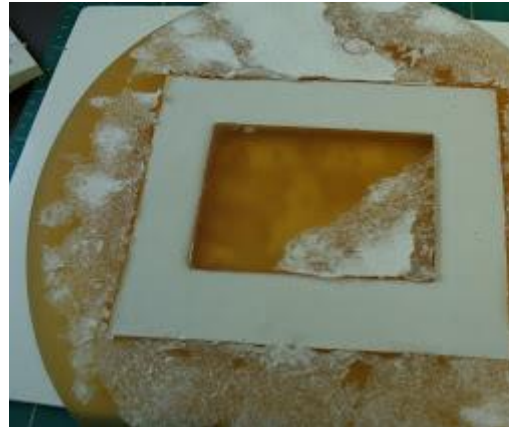


You can see the details from the hot glue drawing in the mold.

MAKE YOUR OWN MOLDS AND CASTS



Spray mold release again before pouring the plaster cast.



Here is my plaster cast hardening.
THEN...As the plaster was de-molded it shattered. This was due to the facts that the original foamcore frame was made too thin and fragile and the plaster was mixed too watery and weak.

In the next photos you will see the second attempt:



This is the second cast made from a **2 layer thick** foamcore picture frame.



The mold and cast on the left are the first (brittle) attempt and the mold and cast on the right are the second (solid) attempt.



This is the final product after it was painted. A layer of shine gloss was sprayed over it to give it the look of glazed ceramic.

Keep in mind that like most art making processes, there will be some trial and error. With ComposiMold you can easily go back to the drawing board without wasting any product or money.

Natural Objects Duplicated

Basic Instructions for Organic objects are similar to casting any object with ComposiMold. Bark, leaves, animal prints, acorns, fish, fruit, and branches. With ComposiMold, you can experiment with different objects without worrying about the cost. Experiment with different shapes and see what happens!



1. We recommend first sealing your object to prevent bubbles from forming, and to keep it from sticking to the ComposiMold. Many natural objects are porous and air will be expelled when heated. Sealing with Shellac or a urethane spray helps reduce this air from escaping. We also recommend spraying with Bubble Buster to reduce bubbles from staying on the surface of the part.
2. Now glue your object to the container you will be pouring into (to keep it from floating). Or glue it to cardboard to make a thicker mold (Seal the cardboard to prevent sticking). Making a thicker mold is useful for thin objects such as leaves. Then glue the cardboard to the container. Hot glue works very well.
3. Clay can be used to fill the empty space (where a leaf might be curled or a fish gill is open) to keep the mold from burying this part of the object.
4. You are now ready to spray your object with mold release. Spray the object until there is a thin layer and allow a couple minutes to dry.
5. Begin pouring the ComposiMold until it is at least a ½ inch above the highest part of your object.
6. Once ComposiMold has solidified back to its original rubbery consistency you can remove the object
7. Fill the mold with your Casting material, wait to cure and enjoy.



Bacon Earrings

Believe it or not, Bacon is trending these days! You can find it in chocolate bars, ice cream, and even bacon tattoos are popular! This inspired the bacon earrings project that we thought was pure, original, genius. (Then we looked online and found hundreds of photographs of bacon and egg earrings.) However I think we were the only ones who made a mold of actual bacon to create our dangling treats.



It's easy to duplicate a few pieces of bacon in the name of art and fashion!

Below is a supply list for this project:

- Bacon!
- ComposiMold
- ComposiMold Bubble Buster
- Resin (as your casting material)
- Mold Release
- Mold Box
- Hot Glue Gun and Glue (to secure the bacon to the bottom of your mold box)
- Dremmel Tool/Power Drill and 1/16" bit
- Jewelry Wire
- 2 Black Beads
- 2 Earring Findings
- Acrylic Paint and Small Brushes

1. First of all cook bacon and put a few pieces aside for the project. (Do your best.)



2. Secure the cooked and cooled bacon to the bottom of your mold box.
3. If you are using other food items to make a mold you may need to seal them with a silicone spray to avoid air bubbles from escaping.
4. Spray the bacon with mold release

MAKE YOUR OWN MOLDS AND CASTS

and Bubble Buster as usual.



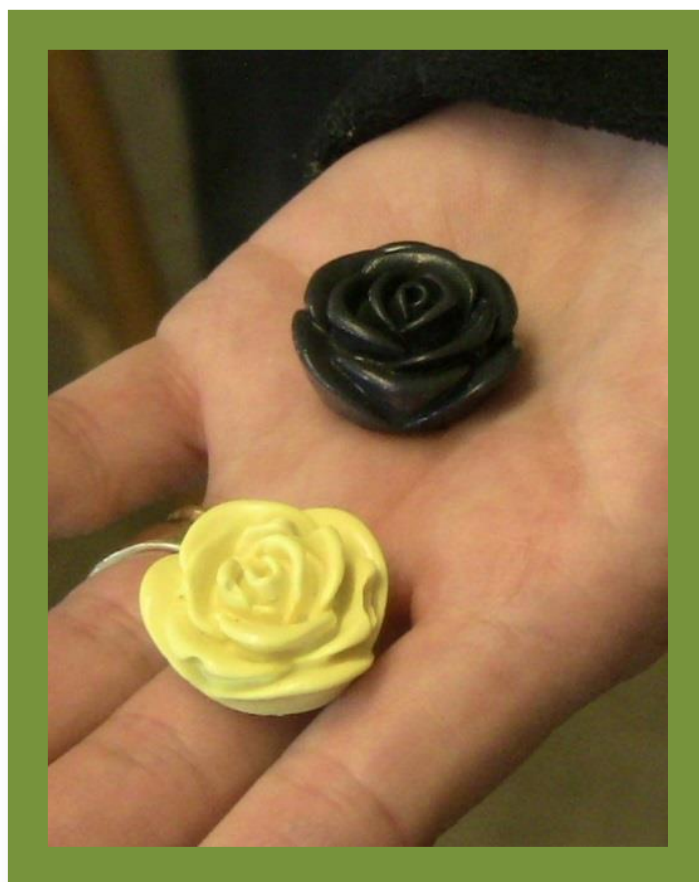
5. Pour the melted CompositMold into the mold boxes and let it rise up and over the bacon.
6. Let the mold solidify.
7. Remove the bacon from the molds. It's ok if the bacon falls apart as you de-mold it.
8. Spray the mold cavities with mold release and prepare the urethane resin.
9. Pour the urethane resin into the molds and let it cure.
10. De-mold the plastic bacon casts.



11. You can finish the casts with a dremell tool to sand away unnecessary urethane from the back of the casts. This reduces the weight of the final earring and makes the cast look thinner and more realistic. Then you can also drill a hole in the top portion of the cast to loop the jewelry wire through.



12. Paint the casts to look like bacon and loop the jewelry wire through the hole. Then thread the black bead and wrap the wire around the earring finding to complete the project.

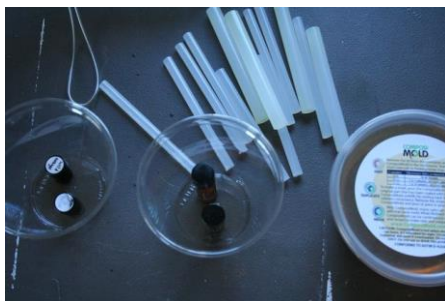


STUDENT PROJECT:
University of Maine at Orono,
Urethane Casting

Glass Bottles; Cast in Hot Glue



Believe it or not you can use hot glue straight out of the hot glue gun as a casting material for small parts. It is very important to cool the mold in the freezer for an hour or so before you pour anything this hot into your mold. The instructions below will show you how to replicate cool glass bottles in hot glue.



1. Secure the glass bottles to the bottom of your mold box with hot glue.
2. Spray mold release and Bubble Buster onto the glass bottles and pour the melted ComposiMold into the mold box.
3. Let the ComposiMold solidify and then remove the glass bottles.

Place the molds into the freezer for about an hour to cool the mold. This will keep the mold from melting from the heat of the hot glue casting.

Spray the mold cavities with mold release.



Pull the trigger on the hot glue gun and squirt the glue into the mold cavities. The fewer pulls of the trigger the smoother cast you will get.



Place the molds back into the freezer to speed up the cooling time of the hot glue.

4. Remove the hot glue castings from the molds and enjoy!

CUSTOMER PROJECT:
Matt, Carved and Casted Owl Sculpture



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