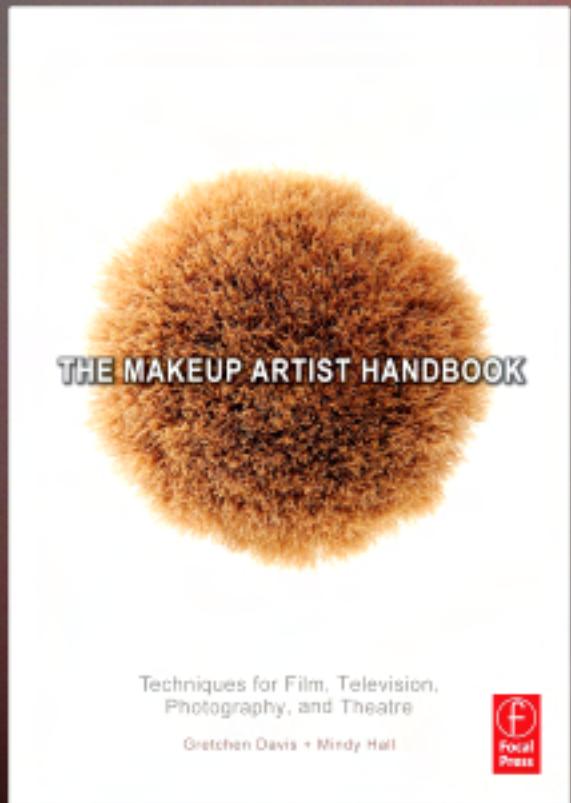


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The Makeup Artist Handbook
Davis & Hall
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II

EFFECTS

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Prosthetics is the process of creating an effect in makeup by sculpting, molding, application, and painting. Prosthetic makeup is widely used today for wounds, to simulate illnesses, to change the shape of a face, or to create a whole different face. Countless monsters and creatures are created using prosthetic makeup. Your imagination is all you need, plus skills in the art of mold making, applying, and painting the final outcome. Finding the right tools and products will help you to create anything the Director has asked for.

You might find yourself behind and in trouble on occasion if you can't produce or help a department head in making, laying, or painting a prosthetic piece. Directors and Makeup Artists are much savvier and expect high-end, quality work. The process in prosthetics starts with molds, making molds and casting chosen materials to go into the mold to cure. There are many different ways to do this, and we'll go over the steps later on in this chapter. In today's market, there are many ways to shorten the path of mold making because of the advances in products being used. There will be many times when you need to rush something out, a request has been made for a last-minute makeup effect, or you need to reuse a prosthetic piece over and over again. Whatever the case, there are easy ways to do this right on location.

As a Makeup Artist, you should also learn where to turn for help in achieving realistic prosthetic applications. Not everyone needs to pour a body cast or to sculpt masks. If you know the process and who to call, then applying the final piece is what counts.

MOLD MAKING FOR TODAY'S MARKET

by Smooth-On

Many products on the market are used for mold making. Most use a variety of flexible rubber products. These products can mimic fine details, are easy to remove from the original piece being cast, and can be used over and over again, which makes these products cost effective. The following rubber products are often\ used by Makeup Artists.

Latex: A natural rubber found in rubber trees, mainly in Southeast Asia. Raw rubber is processed with ammonia and water to make the rubber usable as a molding material. Latex is often brushed or slushed into a mold, but not poured. The advantage of using latex is that you don't have to weigh the product. You can use latex right out of the container. It's not too expensive, and has a high elasticity. Latex molds are also good for casting wax and gypsum. The disadvantage of latex is the drying time. Most latex products need to dry for four or more hours between each layer when being brushed on. Some projects can take up to 20 brushed layers. Also, there can be a strong ammonia odor, but there are products out there today that have addressed this problem.

Silicone Rubbers (Smooth-Sil Series):

Silicone rubbers are two-component systems, and are available in ranges of hardness from very soft to medium. Silicone can be cured with a platinum catalyst or a tin catalyst. You can make molds that are poured, brushed, or sprayed onto a model. Silicone can have negative results when

coming into contact with other products such as sulfur clays. Silicone also must be accurately mixed by using a scale.

Gelatin: Can be poured into a silicone mold. The appliance picks up more detail from the mold if the silicone is slightly heated before pouring the hot gelatin.

SAFETY TIP

by Smooth-On

Materials are safe to use when following directions by the manufacturer. Federal law requires that manufacturers provide important information in the form of a material safety data sheet (MSDS). The MSDS provides all pertinent information on a product—ranging from directions for proper use, to safety precautions, to a list of active ingredients, to associated hazards, to combustion levels, to storage requirements.

PROBLEMS THAT MIGHT ARISE WHEN MOLD MAKING

If the mold has soft spots (partial cure):

1. It was not mixed correctly (premixed).
2. It was not mixed thoroughly.
3. The product was contaminated.
4. It was not correctly measured.

If your mold stuck to the model:

1. The wrong release agent was used; not enough was applied; or it was not used at all.
2. The model was not properly sealed.



FIGURE 11-1: PRODUCT SUPPLIES

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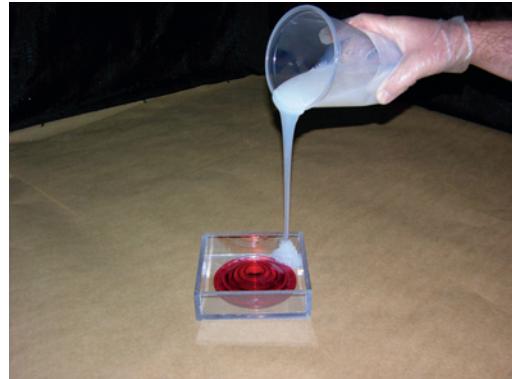


FIGURE 11-2: A MODEL BEING POURED WITH A CONTAINER WALL

QUICK OVERVIEW

1. An original model can be made with almost any material. This includes clay, wax, wood, plaster, stone, metal, bone, or cement.
2. If you are pouring, use a container wall around your model (Figure 11.2). If brushing, no wall is needed.
3. Seal all areas of the mold and model if using porous materials: plaster, wood, sulfur, or water-based clays.

4. Use a release agent for all sealed areas. If you are using silicone, a release agent is not necessary.
5. Follow manufacturer directions suited for your project.

Have good ventilation. Do not inhale fumes, rubber products, release agents, sealers, fillers, resins, and plasters, and so on. Wear good rubber gloves, and minimize skin contact while working. Wash your hands with soap and water, or anywhere there has been contact with products.

Protect your surfaces from spills with wax paper, brown paper, or your own favorite setup towels. Keep your station clean by keeping utensils clean, and surfaces washed with acetone or alcohol to remove any materials that have spilled. Gelatin can be simply washed off.

What should you have in your kit for mold making? Smooth-On suggests the following:

Wood or acrylic pieces for container walls (this is for containing any product from spilling over). Mold boxes can be homemade.

Scale

Modeling clay

Mixing containers

Stirring sticks

Sealing agent

Release agent

Mold rubber or molding material of choice

If you find that your mold did not set properly, it could be for one of the following reasons:

1. Wrong mixing measurements
2. Wrong type of scale (should be a gram scale or triple beam balance)
3. Temperature too cold

Steps to Silicone Mold Making with Smooth-On:

1. Sculpt (Figure 11.3).
2. Release (Figure 11.4).
3. Mix product (Figure 11.5).
4. Apply thin layer (Figure 11.6).
5. Apply second coat (Figure 11.7).



FIGURE 11-3: SCULPT



FIGURE 11-4: RELEASE



FIGURE 11-5: MIX PRODUCT

6. Apply third coat (Figure 11.8).
7. Remove mold (Figure 11.9).
8. Scrape clay (Figure 11.10).
9. Measure out (Figure 11.11).
10. Mix flesh tone (Figure 11.12).
11. Mix (Figures 11.13 A and B).
12. Mix quickly (Figure 11.14).
13. Spread in mold (Figure 11.15).
14. Release with powder (Figure 11.16).
15. Done (Figure 11.17).

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FIGURE 11-6: THIN LAYER



FIGURE 11-8: THIRD COAT



FIGURE 11-7: SECOND COAT



FIGURE 11-9: REMOVE MOLD



FIGURE 11-10: SCRAPE CLAY



FIGURE 11-13: A,B MIX



FIGURE 11-11: MEASURE OUT



FIGURE 11-14: MIX QUICKLY



FIGURE 11-12: MIX FLESH TONE



FIGURE 11-15: SPREAD IN MOLD



FIGURE 11-16: RELEASE WITH POWDER



FIGURE 11-17: FINISHED DONE PIECE

TERMS

You should know the following terms as they pertain to mold making and appliances:

Adding Color: Mixing pigments or flocking materials to a product before being cast into a mold.

Alginates: Seaweed-based products used to take an impression of an object or person to be used in mold making.

Chavant NSP Clay: Sculpting clay that holds fine details, sculpture free

and available in soft, medium, or hard grades.

Casting: A product being used in a mold to create molded reusable appliances.

Cure: A chemical reaction that occurs when you mix two ingredients together that finish.

Cure Inhibition: Certain casting products can be inhibited by contaminants used in or around a work area, causing the molded product to remain tacky or not to cure.

Demolding: When your product has cured enough to be taken out of the mold.

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Green Marble SeLr: Makeup sealer, used in aging techniques and for multiple layers.

KRYOLAN Crystal Clear: Protective coating with clear finish that doesn't yellow.

Myristate: An additive for high-grade cosmetics. Also used as an emulsifier or moistening agent.

Mix Ratio: The proper mix of products.

Plastics: Products such as W.M. Creations, Inc. A.M.E.K. based liquid plastic. Not to be used directly on the skin. Use in stone or silicone molds.

Pot Life: How long the product mixed will last for usage.

Pros-Aide: A prosthetic adhesive that can be mixed with acrylic paints. Has a strong bond.

Pros-Aide Bondo: Pros-Aide mixed with Cabosil.

Platinum Cure Silicone Rubber: Abrasion and heat resistance in a versatile product for

mold-making productions. Materials such as plastics, concrete, wax, low-melt metal alloys, or resins can be cast into silicone-rubber molds.

Release Agent: An agent used to help release the product that was cast from the mold.

Rigid Gypsum Molds: Known as stone molds.

Slush Casting: Products that are to be used in a mold, poured and worked around the inside of the mold until all areas are covered. You can slush several layers on top of each other. Each layer must be cured before applying a new layer.

W.M. Creations, Inc. Soft Sealer: Product used to seal wax, gelatin appliances, and as a sealer on the back of gelatin appliances to prevent moisture from attacking gelatin.

SILICONE MOLD MAKING

Matthew Mungle will explain how to make a simple silicone mold, casting, and applying your finished piece. This is a technique that can be done on location with professional results. Matthew Mungle: "Silicone is a flexible material, and easy to demold appliances. Once a silicone mold is made, it should last indefinitely. Silicone molds can be made quickly and on location."

What should you have in your makeup kit to be able to create silicone molds and their appliances? Mold-making kit:

- Silicone mold-making materials
- Small spatulas

Throwaway brushes

Liquid soap such as Ivory clear soap

Pros-Aide Bondo

W.M. Creations, Inc. Soft Sealer

Medical mixing cups

Chavant NSP Clay

Sculpting tools

Steps to Silicone Mold Making:

1. Set up your station, Make sure there are no latex gloves or sponges near the work area. Wash your hands and lay down setup towels (preferably paper towels).
2. Sculpt the desired form out of Chavant NSP clay (nonsulfur clay). Spray the clay with one light coat of Krylon Crystal Clear, and dry thoroughly (about three minutes). Mix the silicone material (Third Degree molding material or Skin Tite by Smooth-On). These two products are platinum-silicone based, and are affected by latex or sulfur products. Paint the silicone material onto the sculpture with a finger or throwaway brush, making sure not to trap any bubbles in the cast. Build the material up at least 1 inch to avoid warpage. Let dry at least 30 minutes, then demold.

What to Pour into the Mold

Suggested materials that can be poured into the mold would be plastic, Pros-Aide Bondo, and silicone products.

Applying the Finished Prosthetic:

1. Set the appliance in place on the skin area, holding tweezers if necessary (Figure 11.18).



FIGURE 11-18: STEP ONE



FIGURE 11-20: STEP THREE



FIGURE 11-19: STEP TWO



FIGURE 11-21: STEP FOUR

2. Applying a small amount of 99 percent alcohol under the appliance with a brush or cotton-tipped applicator, let the appliance blend (melt) into the skin (Figure 11.19).
3. Blend off any soft sealer edges with 99 percent alcohol (Figure 11.20).
4. Color with Stacolors, activated with 99 percent alcohol (Figure 11.21).
5. Paint with cut example (Figure 11.22).
6. Finished painted cut (Figure 11.23).
7. Adding blood (Figure 11.24).



FIGURE 11-22: STEP FIVE



FIGURE 11-23: STEP SIX



FIGURE 11-25: STEP EIGHT



FIGURE 11-24: STEP SEVEN



FIGURE 11-26: STEP NINE

8. Cut and blood (Figure 11.25).
9. Finished scar (Figure 11.26).
10. Seal with a soft sealer if necessary.

PAINTING PROSTHECTICS

When an appliance is translucent, there is a realistic quality that shouldn't be painted over. Stacolors, which are activated with 99 percent alcohol, give you the flexibility to paint in thin layers like a wash (translucent)

or opaque (dense so it cannot be seen through). Apply Stacolor with brushes, sponges, or cotton-tipped applicators. Stacolors also come in liquid form, which you can use in an airbrush without having to thin the product first.

Remove products with Isopropyl Myristate, Super Solv, or baby oil. Clean skin first with 70 or 90 percent alcohol. Do not use near the eyes.

PROSTHETIC TRANSFERS

by Christien Tinsley

Some of the wonderful attributes these prosthetics offer are undetectable blended edges, translucency (so they look like flesh when a proper tone is mixed), and incredible tenacity to hold during the long day of a shoot.

In order to set up for a prosthetic transfer application, I first like to prep my station. Materials that I like to have with me at all times when doing a Transfer application are:

Transfer prosthetic to be applied
Transfer paper
Astringent to clean the skin
Cotton pads
Shavers (electric and razor)
Shaving cream
Scissors
Adhesive (Pros-Aide)
Latex sponges
Tissue
Spray bottle (water)
No-color powder
Powder puffs
Q-tips
99 percent alcohol
Brushes
Sealer (BenNye Final Seal)
Hand towels
Isopropyl Myristate
Super Solv

Body, hand, or face lotion

Smashbox Anti-Shine

Tattoo palettes (flesh tones and primary colors)

PREPPING THE SKIN

Depending on what approach you will take for prosthetic transfer application, you will commonly prep the skin by making sure it is free of hair, oils, and dirt. Hair can be tricky if applying a prosthetic transfer because it won't allow full contact of the piece to the skin. Try to remove all hair if possible. Prep the skin by cleaning it with an astringent of your choice. This removes dirt and oil, and slightly dries the skin for better adhesion of paint or adhesive. Sometimes a layer of adhesive can be applied to the skin before the prosthetic transfer, helping in the adhesion.

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PREPARATION:

1. If prosthetic is powdered, gently wash prosthetic transfer with antogrease soap and water. Note: This step is not necessary if prosthetic transfer is already clean.
 2. Stipple a light coat of Pros-Aide over surface of prosthetic transfer all the way to the edges.
 3. Let Pros-Aide dry until clear.
- Steps 4–8 should be done only when ready for application to actor:
4. Place prosthetic facedown onto shiny side of transfer paper.

5. Press firmly onto paper, paying close attention to the edges. This is the most important part of the preparation.
6. Trim as close to the edge of the prosthetic as possible.
7. Peel off plastic top sheet slowly. If parts of prosthetic pull away from paper, lay the whole piece back on paper and repeat step 4 until prosthetic comes off clean.
8. Now you're ready for application.

APPLICATION:

1. Place prosthetic transfer face down on skin, and press firmly.
2. Wet back of prosthetic transfer generously with a Tinsley Transfer moistener (filled with water).
3. Continue wetting the paper for approximately 30 seconds, and slice or peel the backing off. Smooth transfer gently with water, and let dry well. Any visible edges can be blended away using 99 percent alcohol.
4. Powder generously with no-color powder of your choice. Gently wipe any excess powder, and seal prosthetic transfer with a spray of makeup sealer (we recommend Ben Nye Final Seal).

PROSTHETIC TRANSFER APPLICATION STEPS WITH CHRISTIEN TINSLEY:

1. Lay down with water (Figure 11.27).
2. Peel (Figure 11.28).
3. Blend visible edges (Figure 11.29).
4. Powder (Figure 11.30).



FIGURE 11-27: STEP 1: LAY DOWN WITH WATER



FIGURE 11-28: STEP 2: PEEL

5. Seal (Figure 11.31).
6. Paint (Figure 11.32).

ON-SET

In order to maintain prosthetic transfers on-set, be aware. As with any makeup, things can happen with prosthetics. An actor sleeps hard over lunch, or he rubs his arms on a table while eating, or the scene requires actors to wrestle or sweat or run,



FIGURE 11-29: STEP 3: BLEND VISIBLE EDGES



FIGURE 11-31: STEP 5: SEAL

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FIGURE 11-30: STEP 4: POWDER



FIGURE 11-32: STEP 6: PAINT

etc. Always have backup transfers with you, and alcohol, in case you have to remove and apply a new one on-set. Do not remove with oils in the middle of the day because your next one won't stick. For minor repair, have a premixed color or colors to match the tones and to fill in areas that have rubbed away. If an edge has pulled up or rolled over, you can fill it in

using any kind of filler of your choice (bondo, wax, etc.). Remember, it is always best if you have time to remove and apply a new piece. Things happen—just be resourceful and prepared.

To Remove

Saturate prosthetic transfer with adhesive remover of your choice (Super Solv,

Isopropyl Myristate, Detachol, etc.), and rub gently with remover and dampened powder puff.

APPLICATION OF GELATIN PROSTHETICS

by *Kenny Myers*

The information contained within the context of this article is presented in good faith. The responsibility for the use of any material in special makeup effects rests solely with the user. The author assumes no responsibility for the use, or misuse, of any material, technique, or informational content discussed within this article.

WHAT IS GELATIN?

Gelatin is a colorless protein formed by boiling the skin, bones, and connective tissue of animals. It is used in food, pharmaceutical, photographic, ballistics, and cosmetic manufacturing. The end result is a protein derived by rendering the remnants of the animal down to a powder that is composed of about 84 to 90 percent protein, 8 to 15 percent water, and 1 to 2 percent mineral salts, free of additives and preservatives. It also contains about 18 different amino acids joined together in a chain.

In the film and television makeup industries, gelatin appliances are an alternative to foam latex in that gelatin is a moldable, flexible, and translucent material that simulates human flesh in a more natural way than latex. Gelatin for prosthetic appliances has a much higher

Bloom, or stiffness, (around 275–300) than the gelatin used for food consumption (around 200–250).

When you purchase gelatin from a supplier for appliance construction, you shouldn't have to concern yourself with the Bloom. Though it is useful to know that gelatin's "Bloom," is the relative strength or rigidity of that brand or grade of gelatin, as well as its water-binding capacity. The higher the Bloom number, the denser it will be. Gelatin is hydroscopic, which is a fancy way of saying it likes and absorbs water, swelling to many times its weight of dry gelatin as you mix in liquids, turning the dry gelatin into a slurry. The higher the Bloom, the higher the price as well. The Bloom scale was created by Oscar T. Bloom. He must have played with an awful lot of gelatin in his time!

HOW TO MAKE GELATIN

Many companies sell pre-made gelatin blocks that come in a variety of colors which you can use "as is." As well, many provide a clear block that you can add your own colorants to. This would be the best place for any Makeup Artist to start until you understand the processes and the medium.

Gelatin formulas are as unique as the artists that use the material; however, if you're determined, understand that whatever formula you find that works for you may not work for your friend across town. Why? Many reasons. For example, you may not buy raw materials at the same place, so the gelatin may be a little different, Or the

sorbitol or glycerin may be formulated differently and your method of processing the gelatin into your mold may differ. Any or all of these things may throw a wrench into your “formula,” but you’ll learn this as you go.

A general place to begin would be to have on hand some gelatin, sorbitol (which increases the tear resistance while being less affected by humidity; usually sold as a 70 percent solution), and glycerin (which replaces much of the water that would be used in food formulas), along with a good scale to measure out your ingredients. These three ingredients are used in most basic formulas, and can be obtained from internet special-effects supply houses or any of the brick-and-mortar special-effects supply houses across the nation. As a side note, sorbitol is sold in two forms: a powder and a liquid. The liquid is the sorbitol already in solution, and it’s the form I like better for its ease of use. The liquid is usually sold as a 70 percent solution.

Reiterating and many words of caution: ingredients are not necessarily the same from vendor to vendor. The supply of gelatin, the mix of sorbitol, the glycerin—can all vary. I can’t urge you enough to make a chart of your ingredients and procedures, and to write down everything—including proportions of ingredients, time of day, time of year, weather conditions, type and wattage of microwave. All these things can have an effect on the end result. The object of all this work is to create a batch size that works for the appliance you’re making—let’s say, a prosthetic nose.

Gelatin, like a lot of makeup processes, came from many artists and many years of contribution and sharing their knowledge with each other. Much of what is outlined here is from the contributions of Dick Smith and Kevin Haney, who did a great deal of experimentation early on, with many successes and failures that many people today take for granted. It’s not an exact science, and as an artist you can be surprised by all kinds of problems, usually at the wrong time. There is no shortcut to experimentation and experience. Keep a record of each formula, and network as much as possible.

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Here is a starter formula: to 20 grams of gelatin, add 40 grams of sorbitol (70 percent solution) and 40 grams of glycerin. Other ingredients to consider by testing their effect on the finished appliance: water, zinc oxide, face powders, flocking, pigments,

CAUTION: Pigments should be FDA approved for use in cosmetics. Pigments from an art-supply house may not be suitable for cosmetic use—so don’t use them! Safety is your responsibility.

Heating the Gelatin

Melting the gelatin into a liquid is necessary to both homogenize the mixture and break down the powdered gelatin so that it can be poured and molded. Usually this is done in a microwave for both convenience and speed. **CAUTION:** hot melted gelatin is dangerous, and can blister and severely burn your skin. So be extremely cautious, and protect yourself with both gloves and goggles.

Microwaves come in different wattages, so a setting of #4 for 15 seconds on one machine is not the same as #4 on another machine. Read the ratings, usually written on the back of the appliance somewhere, and write this information down.

A double boiler can also be used, but will take a bit more time. Remember to put your gelatin into a metal bowl or container, and place it into the water of the lower boiler. Do not use bare hands—it will burn you. Instead, use gloves for hot work, or a long gripping tool (pliers) to place and remove your container of melted gelatin. If you allow gelatin to boil with either method, the gelatin will break down, making it useless. So don't burn it. Allow your gelatin appliance to cool in the mold. Most artists will put the mold in a refrigerator (not the freezer) to speed up the process.

Molding Gelatin

UltraCal 30 Molds are the best place to begin because they are economical, and many people are still using them today. For the advanced user, Epoxyical gives a better release and won't break down as easily. But it is more expensive, and needs more time and skill to make. Silicone molds are also used, so there are a variety of techniques to choose from. All have advantages and disadvantages, as with any material—you just have to find what fits your situation, pocketbook, and skill level.

Keep in mind that your molds should be kept warm. A cold mold will solidify your gelatin before it can flow into all the areas you require. It's also best to fill your molds with the negative side down, placing your positive

side into it. You will probably have to vent your mold to eliminate voids, air traps, or to prevent hydraulic back pressure from squashing your mold's halves together. Many Makeup Artists use a sealing coat on their UltraCal molds, but some do not. Some use a thin film of Vaseline for a mold release. Others may use PAM cooking spray or Epoxy Parfilm.

Assuming that you've flashed your mold as you would for a foam latex appliance, powder the gelatin as you remove it from the mold. Use no-color powder, talc, or cornstarch. Leave any flashing on the piece after removing it from the mold. This will be a great help in maneuvering the gelatin and handling the piece for application. Gelatin appliances should be kept on a form to keep them from losing their shape, so have either a vacuform copy of the positive or just a plaster copy. Remember to clean the finished pieces thoroughly with alcohol or acetone before application.

What your makeup kit should contain for gelatin applications:

Acetone
Brushes
Sponges
Green Marble Sealer
Pros-Aide
Witch hazel
No-color powder
Skin Illustrator

Prepping the Appliance:

1. Flip over the wound so the bottom side is up.

- Clean the gelatin piece with acetone using a brush or sponge.
- Let dry thoroughly.
- Lay flat on underside, then apply two to three layers of Green Marble, drying each layer.

Applying the Gelatin Piece:

- Cleanse (using toner) the area of the face or body that the gelatin piece is being applied to.
- Fit the gelatin appliance to its intended position; in this case around the jawline (Figure 11.33).
- Lift areas of the appliance, and apply Pros-Aide with a sponge (Figure 11.34). Allow to dry most of the way clear. Press into place. It's best to start from the inside pressing outward. If you fold an edge, use a little alcohol on a brush, and lift the edge to replace it correctly.
- Have chin slightly down, and attach one side at a time (Figure 11.35).
- Take flash off with witch hazel (Figure 11.36).

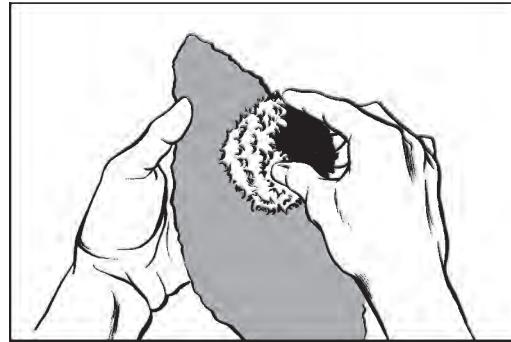


FIGURE 11-34: STEP 2: LIFT APPLIANCE AND APPLY PROS-AIDE (ROBERT ILLUSTRATIONS)

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FIGURE 11-35: STEP 3: CHIN SLIGHTLY DOWN AND ATTACHING SIDE (ROBERT ILLUSTRATIONS)

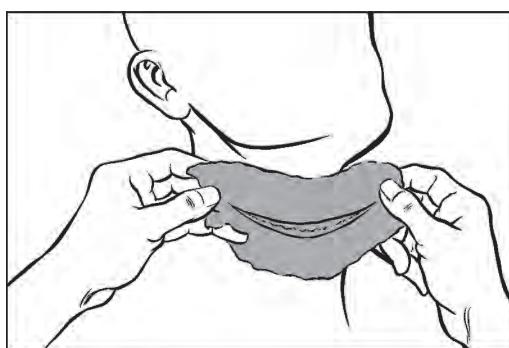


FIGURE 11-33: STEP 1: GELATIN APPLIANCE UNDER JAW LINE (ROBERT ILLUSTRATIONS)

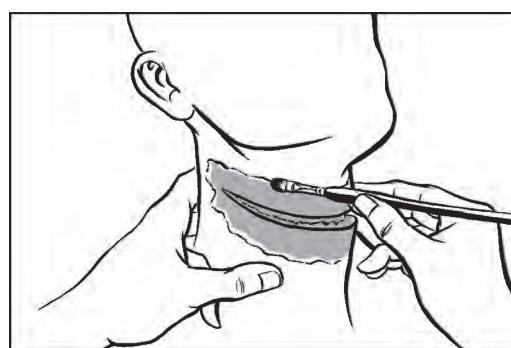


FIGURE 11-36: STEP 4: TAKING FLASH OFF WITH WITCH HAZEL (ROBERT ILLUSTRATIONS)

6. Gently blend edges with witch hazel—it's easy to overdo this step and dig a hole in your appliance edge.
7. Blend the edges with stipple sponge and Pros-Aide (Figure 11.37).
8. Apply Pros-Aide all over the whole piece.
9. Let dry completely.
10. Use no-color powder around edges.

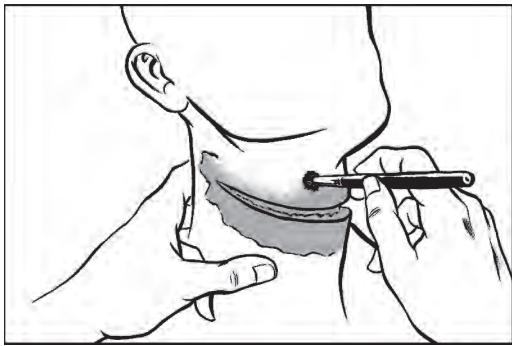


FIGURE 11-37: STEP 5: BLEND THE EDGES WITH PROS-AIDE (ROBERT ILLUSTRATIONS)

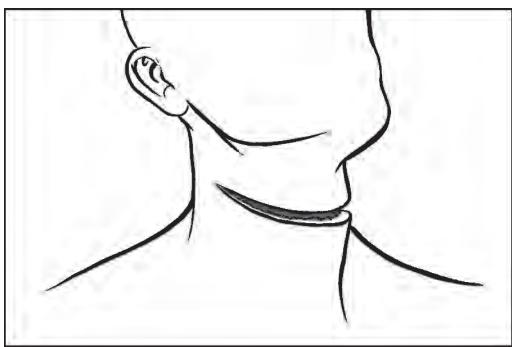


FIGURE 11-38: STEP 6: PICTURE OF FINISHED APPLIANCE (ROBERT ILLUSTRATIONS)

PAINTING GELATIN

by Kenny Myers

Now that your appliance is prepped and applied, you're ready to paint. If you've done your homework and have properly made your appliance (including the intrinsic coloring) and paid attention to translucency (the balance on intrinsic coloring to the mass of gelatin), the piece should require only a series of color stipples and wash passes using Skin Illustrator (my favorite). Taking a standard wedge of white makeup sponge and tearing holes in a random pattern on the application side of the sponge gives an excellent pattern on the appliance. Overstippling with this sponge will result in a natural soft skin pattern. Be careful not to use too opaque a mix of color, but instead, soft washes of color on the sponge.

Another favorite technique of mine is a hand-painted scumble, instead of using orange or red stipple sponges. This technique uses a round natural-bristle brush, usually around a #8, and the color is placed on the appliance in what may seem like a random pattern. However, if you closely study most skin, you'll see variations of color density and color placement everywhere. This will help "sell" your paint job! Most Makeup Artists are people watchers—not only for behaviors, but also character traits and, most of all, variations in individual colorations. This is a great pastime when sitting around a mall or at any event gathering.

This brings up an issue for those of you wishing to move into the professional

end of the industry. I say this only because, if you are planning a career in the makeup industry, have a “for sure” before you have a “maybe.” I’ve seen many Makeup Artists ignore a tried-and-true method to keep themselves in the technological limelight—only to fail miserably in the 11th hour, when it was too late to correct the situation, and get themselves a reputation for irresponsibility. This warning cuts across all material usage or processes, no matter what they are. This is an issue of responsibility for your contract with your employer.

By permission: Kevin Haney, published in Dick Smith’s Advanced Professional Make-Up Course, Update #3, page 4.

Kevin also notes that sorbitol makes gelatin firmer and less elastic. At the time of *The Believers*, Kevin used a formula that included 7 grams of gelatin (275 to 300 Bloom), 38 grams glycerin, 2½ grams water, flocking, face powder, and zinc oxide.

Internet Resources:

www.gelatin-gmia.com/index.htm
www.gelatin.co.za/

FOAM

Gil Mosko created GM Foam in 1987 to meet the needs of the Makeup Artist for a more user-friendly foam latex. Mr. Mosko has numerous awards, and has developed foam latex that has become the standard in

the industry. Gil explains how to approach working with foam latex, and how to make a gypsum mold.

MAKING A GYPSUM MOLD AND FOAM LATEX

by Gil Mosko

To make a gypsum mold, the mold maker needs to take a life cast of the actor and reproduce his or her face in gypsum (the positive mold). The most popular type of gypsum is Ultracal 30 from United States Gypsum, which is bought in 100-pound bags, or in smaller amounts from makeup-supply houses (such as Motion Picture Effects Company, in Burbank, California). The mold maker would now need to complete a sculpture on the positive. There are many types of clay to sculpt with. Plastilina is the generic name for oil-based clay that never dries out. Common types are Roma Plastilina, and Chavant Clay.

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Once the sculpture is completed, it is important to use more plastilina around the outside of the sculpture to provide “relief” from the negative. In other words, by using this “flashing clay,” a thin strip of contact between positive and negative is created. Having a thin strip of contact creates less surface area of contact, and therefore needs less pressure to squeeze foam out of this contact area. The finished foam piece will now have a very thin edge, which is most desirable for the Makeup Artist who is applying the appliance to hide in the final makeup application. The finished sculpture, complete with its flashing and setter points of contact (to prevent rocking), is now

sprayed with Krylon Crystal Clear Acrylic Spray. This creates a barrier that prevents the positive and negative from sticking to each other during the molding process. Many mold makers also use a very light spray of MR 1500 (spray Vaseline) or Parfilm spray.

The simplest form of foam mold is the two-piece squash mold. It has a simple positive, free from undercuts. To match it, there is a one-piece negative, containing all the information from the original sculpture, but in the reverse, or negative. These two mold pieces fit together intimately. The mold-making steps are simply put: make a wet clay floor and walls around the sculpture, which sits on the mold positive; splash a coat of wet gypsum; add a second splash coat, hemp or burlap coats, and a finishing coat; including three feet.

Our lab has a steadfast rule: "Feet on every mold." Having little feet on the negative means that the mold will sit in a stable manner on the table, without rolling or rocking. This will enable the user to adjust the mold strap without having the resistance of the mold sitting on the strap. This is especially helpful in light of having a full foam injector and many molds to fill. The user can save precious seconds by not having to fiddle with mold straps that are rubbing against the bottom of the negative mold.

The most popular form of gypsum for these molds is Ultracal 30, from United States Gypsum. Although many people use burlap as a mold-strengthening fiber, we prefer using hemp fiber. The simple reason is that hemp has many more fibers per inch than

burlap, and the number of fibers adds to the strength of the mold. Once the mold is finished, it is always best if you have the time to allow the mold to sit overnight before opening it. GM Foam likes to heat the mold to about 120 degrees Fahrenheit, so the plastilina inside will be softened. In this way, the positive and negative can be separated with far less resistance from the rock-hard, cold plastilina.

In extreme cases, preheating before opening a mold will actually save the interior of the negative, which would otherwise be chipped and broken by the hard, cold plastilina. After opening the two mold halves (positive and negative), all of the plastilina must be carefully removed. Use wooden tools to scrape away the plastilina. Never use metal tools, which will scratch the interior of a mold. When the mold is fairly clean, it is time to scrub the interior with 99 percent isopropyl alcohol with a chip brush. This will wash out any remaining plastilina residue and oil. Your mold is now ready to be prepped for foam use.

New damp molds should be sealed before attempting to run foam in them. Use a thin solution of Johnson's Paste Wax, thinned with 99 percent isopropyl alcohol. The ratio is about 4 to 5 parts alcohol to 1 part wax. Mix well, then strain out the lumps through cheesecloth or window screen. Paint this "Alco wax" into both sides of the mold, all over the interior. Mop up any pools, and place the mold in front of a fan to dry. After the alcohol has evaporated, repeat this sealing process. It is always wise to bake out wet molds at this point. A convection oven works much better than a plain oven that does not have circulating air. We bake out

molds at 140° Fahrenheit, but many of our friends use temperatures as high as 180°F. The moisture will stay in the mold for much longer than you think. It often takes a minimum of six hours to truly bake a mold.

After baking the empty mold, a third painting of Alco wax is done. When that is dry, the interior mold surface can be brushed out with a chip brush, or polished with a towel. This will make the surface shine. Use GM Foam Mold Release around all of the edges, where the mold pieces contact each other. Just paint a very thin layer of the white GM Release all around the perimeter of the piece, and let dry to white film. Your mold is now ready to be used with foam.

STEPS TO MOLD MAKING:

1. Little feet (Figure 11.39).
2. Little feet (Figure 11.40).
3. Sculpture (Figure 11.41).

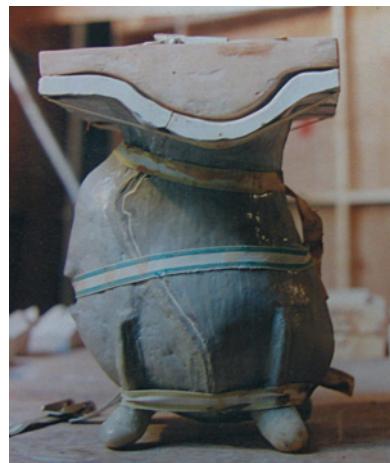


FIGURE 11-39: 1ST LITTLE FEET

4. Clay walls (Figure 11.42).
5. First splash coat (Figure 11.43).
6. Second splash coat (Figure 11.44).
7. Hemp coat (Figure 11.45).
8. Finished coat (Figure 11.46).
9. Two pieces (Figure 11.47)

FOAM MOLDS

All of GM Foam's latex kits come with excellent instruction sheets. For this



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FIGURE 11-40: 2ND LITTLE FEET



FIGURE 11-41: SCULPTURE



FIGURE 11-42: CLAY WALLS



FIGURE 11-45: HEMP COAT



FIGURE 11-43: SPLASH COAT



FIGURE 11-46: FINISHED COAT



FIGURE 11-44: SECOND SPLASH COAT



FIGURE 11-47: TWO PIECES

illustration, let it suffice to say that liquid latex and other ingredients are weighed into the mixer bowl. The mixer is turned on low for a minute to mix all the ingredients, and then turned to a high speed to whip the foam to a desired volume, usually four to five times the original volume. When the foam reaches this height, the mixer is turned down to a lower speed to pop large bubbles and “refine” the foam. All the while, ammonia is escaping from the mixer bowl.

As a function of this ammonia loss, the foam will have a steady drop in pH. When a certain point is reached (usually pH 10.4), the user carefully pours in a preweighed amount of gelling agent. This begins an acid-producing reaction in the foam, which will eventually coagulate into a solid mass, or “gel.” Before the foam actually gels, the user will have ample time to fill the foam molds and close them. It is important to gel the foam before putting it into an oven to cure, because ungelled foam will collapse if it feels the heat of the oven. Cells will start popping, and the resulting foam will look like Swiss cheese.

Curing the foam will cause the rubber molecules to cross-link, or “vulcanize.” This transforms the raw foam into a springy sponge. Most small appliance molds will need three to three-and-a-half hours in the oven at 185° Fahrenheit.

Then the molds are cooled slowly to a comfortable temperature for handling. When removed from the oven, the two mold halves are pried apart, and the resulting foam piece is removed, taking great care not to tear it during removal from the mold.

PRO TIP

DO NOT USE YOUR HOUSEHOLD COOKING OVEN FOR FOAM USE!

Please keep in mind that during the curing process, toxic vapors are given off, which will poison your oven for food use.

It is recommended that you wash the completed foam pieces in warm water and a few drops of baby shampoo, or a few spoonfuls of Simple Green. Then the pieces are gently rinsed, pressed between two towels, and placed on a form that keeps the natural curve of the piece intact. Never wring a piece of foam. If the foam is not allowed to dry in its own natural shape, it will “take a set” from any wrinkles or folds. These set-in flaws will almost always be permanent, ruining the piece, so please be careful to always store foam pieces in their natural curvature.

For long-term storage, foam pieces should be powdered, then sealed into plastic bags or airtight food containers. If kept in airtight containers, away from light, foam pieces can be successfully stored for years.

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A WORD ABOUT THE STATE OF LATEX IN THE WORLD

All foam latex systems are a combination of natural latex (concentrated sap of rubber trees), a soap to make the foam whip up to desired volume (foaming agent), a vulcanizer (curing agent), and a coagulant (gelling agent). Some of the ingredients are

extremely safe, such as the foaming agent, and others are toxic. Both the curing agent and the gelling agent are poisonous. Therefore, the entire system should be treated with respect, and basic safety precautions should be used. It is important to note the following: Up until last year, there was one major plantation in Indonesia that manufactured natural creamed latex. Their largest customer was an elastic-thread manufacturer. When the thread manufacturer went out of business, the rubber plantation chose to discontinue the production of natural creamed latex. Several companies have begun making a replacement product. This new product is concentrated centrifuged latex. Normally, centrifuged latex has a solids content of 60 percent, which is too low for our type of foam making. But now the new product being produced makes this centrifuged latex about 67 to 68 percent, which is perfect for making foam. To my knowledge, all the major foam companies are using this evaporated centrifuged latex.

At GM Foam, we still believe in natural creamed latex. Through difficult dealings, we have contracted a plantation in another part of the world to start manufacturing the original type of creamed latex for us. We believe the physical properties of this type of latex to be superior to the evaporated centrifuged latex. Remember that the centrifuged rubber has been exposed to heat for hours. The latex in the huge drums turns to a thick glop. All of the ammonia preservative has long gone, and we believe that oxidation is occurring during this process. Of course, ammonia is added back into the latex before it is sold, but in the time the latex was a thick paste, it lost some

of its physical characteristics, due to oxidation of the evaporating process. Our new creamed latex is as good as anything we have seen in the past 20 years. When we see cell structure that is strong and resistant to breakdown, and a smooth, shiny surface on gelled foam, we know that our rubber is performing the way it did back in the 1980s, when we started. Creamed latex is back, and we have it!

SAFETY:

1. Read the instructions before starting. Refer to the material safety data sheet (MSDS) for more information.
2. Have adequate ventilation to remove ammonia fumes.
3. Wear safety goggles and gloves when working with foam.
4. Do not let foam components come into contact with skin. If this happens, wash with soap and water as soon as possible. Clean up spills.
5. Wash your hands after working with foam. Never eat, drink, or smoke without washing first.
6. Anyone working with foam latex should keep a set of material safety data sheets nearby in case of emergency.

GM FOAM WARNING: Never use a household oven for curing foam. Fumes given off by curing foam are toxic for food use. Keep these and all chemicals out of reach of children and pets.

PREPPING ULTRACAL 30 AND OTHER STONE MOLDS

New, damp molds should be sealed with wax before applying GM Foam Mold

release. An effective wax sealer can be made using Johnson's Paste Wax (or any carnauba wax) that has been thinned with 99 percent isopropyl alcohol. We use a ration of 4 parts alcohol to 1 part wax.

Liquid latex and other ingredients are weighed and placed in a mixer bowl. The foam is now whipped at high speed, until it rises like whipped cream. When the desired height is reached, the mixer speed is turned down, and the foam is refined to make the bubbles or cells smaller. This also allows the ammonia content of the foam to decrease. At just the right time, gelling agent is added to the slow-turning mixer. After about two minutes of slow blending, the mixer is turned off, and the foam is poured into the negative mold. The positive is carefully placed on top of the negative. Now pressure is applied to squeeze the two mold pieces together. With small molds, simply pressing with the hands will suffice. Larger molds require mold straps to create a good pressing action. Often the negative requires a wooden board to be placed on it and then be strapped. This increases the leverage of the strap, and gives a greater squeezing action.

FILLING MOLDS

Curing

Once the foam has gelled, in a few minutes the mold can be placed into the oven for curing. During this process, vulcanization occurs. The latex molecules chemically cross-link, and give the foam piece a memory. Once demolded, the foam will spring back into shape after being pressed.

Demolding

Specific instruction and product knowledge can be acquired by contacting GM Foam, Inc., directly: (818) 908-1087.

HOW TO PAINT FOAM APPLIANCES

by Gil Mosko

The gluing of a foam appliance is more or less a mechanical process. There are many different adhesives, but an appliance is built to sit on the face or body in one specific way, and is never stretched. Let us assume that your appliance is glued to the face, and it is time to paint. The goal of course, is to make the paint job not only look like the surrounding skin, but to also make an opaque medium appear translucent. This is achieved by building up layers of thin wash of color, so you can see through the layers and see depth.

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We all learn by watching other artists. In my case, the truth is that the very gifted artist Greg Cannom had me visit his lab, along with my model, and literally showed me how he painted a bald cap. This was during the period in the '80s when I was studying for my union exam. I applied a bald cap to my model, and Greg painted it. That simple act of generosity has, since that day, changed the way I look at painting.

Everyone has their own style. Todd McIntosh begins with a base coat of reddish color, and paints everything over the red. This lets the painting have the feel that there is blood under the skin, and you can barely see it, once again creating depth. I like to use a base coat of paint that closely resembles the actor's or actress' skin. I use full-strength Pax Paint (a term coined by our dean of makeup, Dick Smith). I might

add that GM Foam, Inc., has a complete line of Pax Paints in two palettes: Dark flesh tones, and Light flesh tones. Each palette also has a red appropriate to the other colors. Once the piece is painted, I gently feather a very thin layer of the base coat onto the skin, using a white makeup sponge. From this point on, I use what artists call "scumble sponges." Take a white makeup sponge, hold it in both hands, and pull until it breaks into two pieces. This edge is then picked at with your fingernails, until little holes have been picked away.

The sponge is now a stamp of sorts, and can be used to create a mottled surface.

PAINTING STEPS:

1. After the full-strength base coat, I never again use full-strength Pax Paints. I thin them with water until they are mere washes of color.
2. After the base color, I paint a thin coat of red by dabbing the scumble sponge, constantly turning it as I dab, so the pattern of the sponge cannot be seen repeating itself. I dry each coat after it is applied.
3. After the red, use a shade one or two shades lighter than the base.
4. Next, use a color that is two shades darker than the base.
5. Then I use greens and blues.
6. Finally, a last coat of the original base as a wash over everything.
7. Once all the Pax colors are dry, I like to use a thin layer of RCMA Appliance Foundation that matches my base color. Incidentally, my Pax colors are keyed into the RCMA color scheme, with such

colors as Olive 1, Shinto 2, and so on, so when you are ready to harmonize all of your Pax layers, you just smudge a little RCMA over the Pax Paints, in the same shade as your base coat. If you use a thin enough layer, it will not hide all of your hard work, and also it will actually bite into the Pax Paint, making the use of powder unnecessary.

8. If there is more shine than you desire, you can use Origins, Zero Oil. Use this product in a sweeping motion. Do not use a stipple technique, or it will dry in little white spots.
9. Finally, if you have the time, you can paint freckles and blemishes, either with greasepaints, or aqua colors.

I can tell you in all candor that there is a point, if you are lucky, when the paint job ceases to be layers of paint, and suddenly becomes skin. For a Makeup Artist, I can think of no greater thrill than to have an appliance painted so accurately and artistically that one cannot distinguish it from the surrounding skin. And believe me, the Director and the Cinematographer will notice.

PRO TIP

As with anything else, this technique requires practice. What I wish for the readers is that you have a good time learning these techniques, and someday do a makeup that is so flawless that you earn the respect of your peers.

—Gil Mosko

BLOOD

There will be many times in your career when you will need to create blood effects. What you use and when to use it will have a big impact on how successful the outcome will be. When a scene requires the use of artificial blood, there are many departments that are involved in creating a realistic effect. In some cases, you will need to camera test the color of your artificial blood. Some blood products will register too dark or too bright under certain lighting and film-processing conditions. These situations are classic examples of working with other departments on a film or television set. You will need to coordinate with the Costume Department, the Prop Department, the Special Effects Department, and, in some situations, the Stunt Coordinator. Discussions about the blood effects start during the prep with the Director. Then, at the production meeting, the First Assistant Director will address any issues, with all departments present and having input.

After the production meeting, there are sidebar meetings with the various departments, at an agreed-upon time, to further discuss the issues.

PRO TIP

Sidebar meetings provide excellent opportunities for fine-tuning conversations and designs with other departments involved, and not subjecting departments that are not involved to a long discussion.

The blood products that the Makeup Artist chooses should be color checked with the Prop Department and Special Effects so that the color of blood will be consistent. A sample of the blood product you have chosen should be given to the Costume Department, to ensure that it is washable and to check for stain factor. The Prop Department and the Art Department will also need to know the products, particularly how to clean the blood products off props and how to remove the blood from the set. If the props or the sets are expensive and cannot be damaged or stained, this will be discussed in the production meeting, and will affect your product choice. In some situations, the Makeup Department will provide the blood products for other departments (such as the Costume Department), or will give the other departments involved the name of the blood product and where to purchase it. If the Makeup Department does purchase products for other departments, just note on the invoice or receipt showing which department it is going to, so that the Accounting Department is able to allocate the cost to that department. Doing so will keep the makeup budget intact.

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If you do not coordinate with others, there will be no continuity in the color or texture of the blood, as well as leading to confusion among departments on the set. These are moments in production and on-set when everyone works together to help each other out to achieve the desired effect. Before we talk about choosing the right blood products to use, it is a good idea to

understand how blood functions in the human body.

What Is Blood?

The human body has about five liters of blood. Blood transports oxygen from the lungs to body tissue, and then transports carbon dioxide from body tissue to the lungs. Blood contains cells and is about 55 percent plasma. Plasma is a liquid and contains 90 percent water. Plasma is a vehicle for blood cells and platelets. Plasma also functions as a carrier of minerals, potassium, and antibodies. Red blood cells also keep blood clean and deliver oxygen throughout the body. Hemoglobin is a protein that is red in color. Blood is constantly recirculated throughout the body. White blood cells are there to fight off infections or germs. Blood platelets are also found in blood. Platelets help to block blood flow around wounds. Clots can form in blood. For example scabs are clots found on the outside of the body, whereas bruises are clots formed inside the body. Clots that are dangerous form inside blood vessels.

How to Choose

You will need to know the answers to a few questions before making any choices on what products to use and how the blood should look. Start with how the script reads. The scene description will get you started with a description of what the action is. Car accident, fight, murder, crime scene, gunshot, bloody nose, illness or death, and cause of death.

- Is there a written description of what it looks like?

- Where is the blood coming from, and why?
- What is the medical implication?
- What does the trauma look like in real life?
- What happens to the texture of the skin?

After reading the script, research and think about how to achieve wounds to match the action. This is one example of using your knowledge of the body, and medical resource books. If the wounds are extensive, consult with a medical doctor. An emergency-room doctor is always very helpful in researching wounds and trauma to the body. Be organized in your questions when consulting with a doctor. Their time is limited, but they are normally happy to help. Most of the time, you will have to schedule an appointment, either over the phone or at the office. If you need medical slides, you will have to go to the office.

Medical slides and photos are protected for privacy reasons, therefore you will need to obtain special permission to access them, as well as a designated area within the doctor's office where you can view them in privacy. Not only are doctors great resources for wounds, but also for all illnesses, diseases, and death, including how long it takes to die from certain diseases or wounds.

If you can answer these questions before meeting with the Director, you will be able to bring ideas to the discussion of how to achieve the desired effect. After reading the script and doing preliminary research, meet with the Director to discuss what he or she wants. Your Director will have a visual idea

of what the scene or action should look like. The Director might also want you to show research on the type of wounds that are required to match the action. In most cases, the Producers will want to be involved in discussions. Producers will also have a say in how much blood is used. This is for reasons related to film and television rating issues, as well as creative choice. There will be jobs where you will have a meeting with the Director before reading the script. This could be during the job interview. They will be looking for how you would achieve certain effects. Ask questions about the action and story line, and what they want—or do not want—it to look like. In some cases, the Director will not know what he or she wants, but they will know exactly what they do *not* want.

MEDICAL DESCRIPTIONS

Busted Eye: Bruising, swelling, an open cut often seen if the person has been in a fight. A freshly bruised eye has just happened and is black and blue in color. A days-old eye injury will be green and yellow in color. This wound effect could be used for many different situations.

Abrasion Wound: Abrasions are surface skin lesions, such as scratches or small cuts, where the skin has been scraped. There is usually no need for stitches to close the wound.

Animal Bites: Animal or people bites are laceration wounds where the skin is torn.

Stab Wounds: Stab wounds or penetrating stab wounds are deep, and often fatal because of the harm done to vital organs.

Broken or Fractured Nose: When the nose has been broken, there will be swelling and bruising. There is also a good chance of the nose becoming deformed. You can also experience eye hemorrhaging and bruising around both eyes, as well as nosebleeds.

Broken Jaw: This is a serious wound for several reasons. The swelling of the tongue can affect the breathing. With facial swelling and bruising, there is a strong possibility of lacerations in the mouth. Blood from these lacerations can cause dangerous choking.

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Compound Fractures: There is a big concern with compound fractures that a blood or nerve vessel could be injured. Fractures of this nature leave the bone exposed due to skin lacerations.

Hemorrhaging in the Eye: Same as the bruise, but located in the eye. Blood vessels that have broken in the eye area become trapped under the cornea and give the eye a bright red stain effect. As the bruise starts to heal, the area will develop a yellow greenish tone.

Burns:

First Degree: Burns that affect the outer layer of the skin. First-degree burns are red with swelling and pain.

Second Degree: Burns that affect both the outer and under layer of skin. These burns cause pain, redness, and blistering.

Third Degree: Burns that affect deeper tissues, resulting in white, blackened, or charred skin that causes numbness.

Airway Burns: These burns can occur when inhaling smoke, steam, or toxic fumes. Symptoms to watch out for are burned lips, burns on head, face, or neck. Eyebrows and hair can be singed. Dark mucus can occur.

Thermal Burns: These burns can occur when scalding liquids, radiation, or flames or hot items come into contact with skin. Symptoms are blisters, peeling skin, red skin, shock, swelling, white or charred skin.

Gunshot Wounds: Your wound size will depend on the caliber of the gun and the shooting distance. The entrance wound is cleaner than the exit wound. The entrance wound is smaller in diameter, with burned edges of skin at the bullet entrance. The exit wound is larger and messier, with the greatest amount of blood and body matter dispersed outward.

WHAT TO USE

Ken Diaz knows the importance of realistic blood. Finding nothing on the market that worked under the many different shooting conditions, he created his own. Ken:

"There always are several factors to take into consideration when creating a makeup. First, you need to determine what type of wound you are creating. Does the wound have arterial or vascular bleeding? With arterial bleeding, the blood is oxygen enriched and bright in color. With vascular bleeding, the blood is oxygen depleted and dark in color. How old is the wound? Is the blood dry or starting to dry? Many times you will

have a combination of all three types of blood in one makeup. For example, the center of the wound may have bright, oxygen-enriched blood. As you move away from the center of the wound, the blood would become oxygen depleted and darker. As you move to the outside edges or on smudges, the blood would be dry or starting to dry. Weather elements and onset conditions can also affect the wound. Is the actor sweating? Is it so cold that the blood is freezing? Is it raining out so the blood could wash away? To get really good at dressing blood to wounds, you need to start thinking organically. Do your research and study medical books. Watch and record true-life medical-emergency shows, boxing, and full-contact matches. Take photos of real-life injuries."

The following are blood conditions and what to use.

Lighting Conditions

When filming in low light, dark-colored bloods will not show up. You need to use a brighter-colored blood for it to be visible. Also use bright-colored blood when applying the blood to any dark surface. The opposite is true when working with light-colored surfaces. Dark-colored blood looks much more realistic on white porcelain than does bright-colored blood.

Blood Viscosity

There are now many blood products available that come in a variety of viscosities or thicknesses.

Heavy: A very heavy or paste consistency blood (such as K.D. 151 Blood Jam) is used

when a nonflowing blood is needed. This type of blood can be applied with a dental spatula, and works very well when used at the base of cuts. You can create very realistic scratches with this type of paste-consistency blood when applied with a coarse stipple sponge.

Less Heavy: A slightly lighter-viscosity blood (such as K.D. 151 Blood Jelly) should be used when a slow-moving blood is desired to help maintain the continuity of a bleeding wound from take to take.

Medium: Medium-viscosity bloods are the consistency of syrup. These are probably the most commonly used type of blood. Some of these bloods have been formulated for specific uses.

Light: Light-viscosity bloods (such as K.D. 151 Pumping Blood) can be used when matching the viscosity of real blood. Also are good to use when pumping blood through small-diameter tubing.

To create a thinner, realistic dry or drying blood, you need to use a medium-viscosity drying blood (such as K.D. 151 Drying Blood Syrup). When a thick, realistically dry or drying blood is required, you need to use a heavy-viscosity drying blood (such as K.D. 151 Drying Blood Jelly).

When applying blood over prosthetic appliances, you will need a blood that contains a wetting agent (such as K.D. 151 Flowing Blood). Blood that contains a wetting agent will help keep the blood from beading up over slick surfaces.

Working outside with conditions that could be hot, cold, or windy, theatrical bloods

tend to have an unrealistic skin that forms on the surface. Applying a little bit of glycerin over the top of the blood keeps it looking fresh and wet. To help avoid this problem, you can use a blood that already contains a glycerin base (such as K.D. 151 Stay Wet Blood).

Mouth Blood

Blood that runs into the mouth should be specially formulated (such as K.D. 151 Mouth Blood).

PRO TIP

Always keep a small can of shaving cream in your kit on-set. Shaving cream removes stains on the skin ranging from blood to permanent markers. It is fast and easy.

There are products out there now that make all the difference in continuity and how a blood effect can be used, without the mess involved with cleanup. Skin Illustrator, developed by award-winning Makeup Artist Kenny Myers, is a water- and abrasion-resistant, alcohol-activated makeup that is available in palettes and liquids. Makeup products such as Skin Illustrator are a must-have in your makeup kit. Throughout the book, we mention different Skin Illustrator palettes, and for now, we'll talk about the Skin Illustrator FX Palette and a few ways it is used in blood effects (Figure 11.48).

The FX Palette was designed for just about any injury or illness imaginable. The Skin



FIGURE 11-48: SKIN ILLUSTRATOR FX PALETTE



FIGURE 11-49: SKIN ILLUSTRATOR FLESH TONE PALETTE

Illustrator FX Palette can simulate first-, second-, and third-degree burns; cuts; scrapes; scabs; and bruises. The FX Palette seamlessly integrates with the flesh-tone palette to create varying degrees of injuries and illnesses (Figure 11.49).

Blood tone is a realistic natural blood color that can be easily altered to a deeper, more theatrical color blood with the addition of ultra blue.

Skin Illustrators are made to mix. If you mix yellow and blue, you will produce a different green than what is already in the palette. Remember color mixing? Refer to the color wheel if you need to refresh your memory. Use the burnt orange to provide a rust tone. The aged blood is a mid-ground aged blood that is not too blue or purple.

By taking the aged blood and adding it to any of the other colors in the palette, you will get a whole new range of color.

For Continuity: If you have an actor with dripping blood, and you'll need to do the shot over and over again, you'll want to keep track of exactly where you applied the blood the first time or at the beginning of the take. Between each shot, there will be a few moments to clean up the actor so you can start fresh again.

PRO TIP

Know what part of the scene each take starts from in order to match the blood, and any changes of the blood, during filming. Sometimes there is a progression to the blood. You will need to take a continuity photo at the beginning of the take and at the end of the take.

If you have laid down blood with Skin Illustrator FX color before the wet blood, you have safeguarded exactly where the wet blood needs to go. If, during shooting, the blood lifts, Skin Illustrator colors will keep the wound looking bloody, even without the wet blood or little of it. Skin Illustrator is also a good way to paint blood on a wound when you don't want to get blood on the wardrobe. For example: a female stunt driver had to match the principal actress. The stuntwoman's arm would be in the shot for a long stretch of time. The principal actress did have wet blood applied to the wound, and the Costume Designer did cut the wardrobe to expose the wound.

Shooting the stuntwoman to match became an issue when wet blood was to be applied. The Costume Designer did not like the idea of the mess that wet blood would make, and the amount of wardrobe that would be used. The solution was to use blood trails made of Skin Illustrator colors, which, on camera, looked just like real blood. Add a little shine on top of the Illustrator color with KY Jelly. This is a product that will maintain its shine without lifting.

Everyone was happy with the results of not having to use wet blood on the stunt driver. Saves you from having to run in over and over again to clean and reapply blood. With this in mind, you can see why distance shots, working in the rain or elements outside, painting your wound for a more three-dimensional look, and keeping continuity are all good reasons to use Skin Illustrator FX Palettes in your work.



PRO TIP

Other products you can use to get the same effect as FX Skin Illustrator: Stacolor and Reel Color.

TEMPORARY TATTOOS

by *Christien Tinsley, creator of Tinsley Transfers, Inc.*

When approaching a tattoo job, research is always important. You have to consider the character and the character history and time line to where and when they got the tattoo.

Also, with so many themes and mixture of themes, having a good direction or vision

from the Director can be helpful in scaling down the possibilities. Let's not forget that tattoos are symbols and representations sometimes of more than just expressive art. Sometimes there are meanings with deep ties to them, and the last thing you want to do is have your actor with something that is offensive or says something about himself that isn't in the character's description. Tattoo books, magazines, tattoo parlors, photography books, and the internet are all good sources to find thousands of ideas.

Today, in feature films and TV, the techniques of HD, bluescreen, and greenscreen are being more commonly used. The trick to a good makeup, tattoo, or prosthetic is to make it look real. If you can fool the eye standing two feet away, you will most likely fool the camera. Don't rely on video monitors—they can be misleading and not a true image for corrections.

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Make sure you have a good relationship with the Director of Photography. In HD cases, there are digital DPs (not Video Assistants) monitoring the recording. Go to dailies. Ask to see them even if they give you a DVD copy. Know what you are looking at. Find out from the Director or DP how they are processing the film in post, so you can be aware if you need to punch up certain colors. There are no disclaimers in film and television for a Makeup Artist.

PREPPING THE SKIN

Depending on what approach you will take for tattoo applications, you will commonly prep the skin by making sure it is free of hair, oils, and dirt. Hair can be tricky if applying a tattoo decal because the hair won't allow full contact of image to the

skin. If you are drawing the tattoo on, hair can just be in the way. Try to remove hair if at all possible. After hair is no longer an issue, prep the skin by cleaning it with an astringent of your choice. This removes dirt and oil, and slightly dries the skin for better adhesion of paint or adhesive. Sometimes a layer of adhesive can be applied to the skin before the tattoo, helping the adhesion of any image or ink being applied.

APPLYING THE TATTOO:

1. Lay the tattoo decal on the skin and apply water (Figure 11.50).
2. Slowly remove the paper (Figure 11.51).
3. Let dry (Figure 11.52).
4. Powder (Figure 11.53).
5. Seal the finished piece (Figure 11.54).

If you are applying tattoo decals, then you first want to cut close to your tattoo image,

and then remove the protective plastic coating. This coating protects the adhesive that has been preapplied to the tattoo images. Next, place the tattoo facedown onto the skin and press firmly over the entire surface. Apply water to the back of



FIGURE 11-51: SLOWLY REMOVING THE PAPER



FIGURE 11-50: LAY ON SKIN AND APPLY WATER



FIGURE 11-52: LET DRY



FIGURE 11-53: POWDER



FIGURE 11-54: SEALING FINISHED PIECE

the decal, and soak the paper. Allow this to sit for 30 seconds or so, and slowly remove the paper. After the paper is removed, wet your fingers or a sponge, and gently—without stroking the surface—press over the

entire image. Make sure the water is completely dried, and then powder generously.

I always let the powder stay until last looks. After you are finished with the makeup, you can be sitting for hours before your first shot, and I prefer to let the powder protect the image. What I have found is that after a while, the powder falls away and absorbs with natural oils in the skin. You may find, by the time you get to shooting, that you require very little sealer. Never put oils such as glycerin on top of a wet or sweaty look. Always use a silicone- or water-based product.

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APPLYING SEALER

When applying sealer, spray into a sponge and first wipe against your own hand. Then take the dampened sponge and lightly rub over the surface of the tattoo until all the powder is removed. You should in most cases not require antishine. If your image is too shiny, then a little antishine rubbed over the surface can help. Try to avoid powders.

APPLYING TATTOO PALETTE COLORS OR TATTOO INK COLORS

Flesh-colored tattoo paints painted over the surface lightly can help dull the surface and give your tattoo a more aged quality. If you need to add color or image to a transfer, then any sort of tattoo palette paint or tattoo makeup inks will work. I try to do this additional work after the tattoo has been applied and before powdering or sealing. Ideally, you have done your research and

were lucky enough to get approval from all parties (Director, Producer, and actor) in time, and the transfer you have made should include all the aging and color you require.

MAINTAINING TATTOOS ON-SET

In order to maintain tattoos on-set, be aware. Like any makeup you do—but even more like a prosthetic makeup—things can happen. An actor sleeps hard over lunch, an actor rubs his arms on a table while eating, the scene requires actors to wrestle or sweat or run, etc. Always have backup tattoos with you, and alcohol in case you have to remove and apply a new one on-set. Do not remove with oils in the middle of the day because your next one won't stick. If it is a minor repair, have a premixed color or colors to match the image and to fill in the areas that have rubbed away. Sometimes just throw your hands up in the air, assess the shot, and say: "Hope we don't see that!" Things happen—just be resourceful and prepared.

REMOVING TATTOOS

To remove tattoos, I mix Isopropyl Myristate and Super Solv 50/50, warm it up in the microwave so it is comfortable on the skin, and use a powder puff. Continue to apply remover with the powder puff, gently rubbing the area, and periodically use a dampened hot hand towel to break up the rubbing cycle. Continue this until the area is clean. Finish off with a hot towel, and then apply lotion to the area to help moisturize before the next day of shooting.

TERMS

Adhesives

Cabosil Mixed with Pros-Aide: These two mixed together form a thick paste that is often used to blend appliance edges into the skin and to repair damaged appliances. There are other usages, too numerous to mention.

Duo Adhesives: A latex-based product often used for eyelash application. Also used for fixing small areas on appliances, building small wounds directly onto the skin, blending edges, and applying jewelry or decorations to the face and body. This is one of those items you have in your kit that becomes an all-purpose product.

Liquid Latex: Also in clear. Used for many different reasons. Liquid Latex can be used to build appliances directly onto the skin, blend the edges of appliances, pour or paint or slush into molds. Is also used as a skin for some foams.

Prosthetic Adhesives: Pros-Aide, for example, is a Prosthetic Adhesive that has many other uses. You can find Pros-Aide or No Tack Pros-Aide formulas. No Tack Pros-Aide dries without a tacky surface, so the product can be used to blend edges and prepare appliances for painting. It is also used as a Pax, and seals work already done. Pros-Aide Adhesive has a milky white texture, a strong hold, dries clear, is waterproof, and can be thinned with water or thickened, but needs a correct remover.

Resin-Based Adhesives: Spirit gum is one of the least expensive resin-based adhesives. It is easy to remove and has a medium hold.

Spirit gum does take longer to dry than other adhesives. Spirit gum is good to use for short time frames or in fashion, applying objects to the skin (beads or crystals, for example). You can find spirit gum in different formulas—regular, matte, extra matte, or extra hold. Spirit gum in matte formulas is often used for lace pieces because the adhesive dries with no shine.

Silicone Adhesive: In its raw form, silicone adhesive is composed of minerals. Silicone adhesive is also found under medical adhesives. It has a strong hold and is fast drying. Silicone adhesives in general work well on sensitive skin and are resistant to water. They are used often by Makeup Artists.

Tapes: Can be thin, wide, double sided, textured, and transparent. There are many usages for tapes found in different materials. There are medical-grade adhesive tapes; tapes to apply hairpieces; to secure bald caps; and to hide or protect small cuts, wounds, and body art on the face and body—just to name a few.

Water-Soluble Adhesive: Adhesive that is easily removed with soap and water.

Thinner

Thinners are made to dilute or thin adhesive products. Most adhesives have a matching thinner to go with their product. For example, Telesis 5 Thinner works with thinning Telesis Silicon Adhesives.

Skin Primers

Primers protect the skin from adhesives or products. They set and preserve the makeup.

Removers

Most often, to be safe, you should buy the remover that goes with the adhesive you are using. Many products are made to be used together in this way. Removers can be solvent based, alcohol based, hydrocarbon based, soap based, oil based, non-oily, made with flammable solvents or nonflammable solvents, and can be thinned with water.

There are removers that have emollients to protect the skin for drying. They can be odor free, hypoallergenic, in cream or gel form for easier use.

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REFERENCES

Diaz, Ken www.kd151.com.
Haney, Kevin, published in Dick Smith's Advanced Professional Make-Up Course, Update #3, page 4.

Mosko, Gil. www.gmfoam.com.
Mungle, Matthew, WM Creations, Inc.. www.matthewwmungle.com.
Myers, Kenny. www.ppi.cc.
Tinsley, Christien, Tinsley Transfers. www.tinsleytransfers.com.

Internet Resources

www.burmanfoam.com.
www.dow.com.
www.fxwarehouse.com.
www.gelatin.co.za.
www.getspfx.com.
www.naimies.com.
www.sculpt.com.
www.smooth-on.com.