



**STOPS
MEDICAL**
A 3B SCIENTIFIC COMPANY

3B
3B Scientific



HYPER-REALISTIC MOULAGE KIT (HRMK)

PRODUCT MANUAL

1025919, 1025888

HYPER-REALISTIC MOULAGE KIT (HRMK)

> CONTENTS

- Parts and Components 3
- Skin 101 4
 - Proper Skin Care 4
 - Skin Safety 4
 - Reel Creations™ Traumatic Wounds Effects Colors 4
 - Special Effects (SFX) Blood Kit 5
 - Partial Amputated Hand Glove 6
 - Partial Amputated Foot Sock 7
- Applying Prosthetic Wounds 8
 - Wound Design 8
 - Alternative Wounds 8
 - Coloring the Appliance 8
 - HRMK Wound Prosthetic Application Process 9
 - Application for Extra Orbital Evulsion 11
 - Application for Eviscerated Bowel 13
- Skin FX 15
 - Cure Inhibition of Skin FX 15
 - Mix & Cure Instructions for Skin FX 15
 - Storage/Shelf Life 15
 - Application for Skin FX 16
 - Alternative Wound Creation with Skin FX 17
- Removal, Care, and Maintenance of HRMK Appliance 18
 - Removal of Appliance 18
- Appendix A 21
 - APHIX Application and Product Information 21
- Notes 22
- Contact Information 24

HYPER-REALISTIC MOULAGE KIT (HRMK)

> PARTS AND COMPONENTS

Your new HRMK comes with the following:

- Gun Shot Exit - 7.62
- Aphix Adhesive Promoter
- Remover – 8 oz bottle
- Double Ended Spatula
- Fine Tip Sharpie (kit includes 3 regular and 2 fine tip sharpies)
- 8oz Blood x2
- Abdominal Evisceration
- Eye Avulsion x2
- Gross Laceration x2
- Open Fracture Fibula
- Open Fracture Rib
- Large 3rd Degree Burn
- Small Blister Burn
- Large Blister Burn
- Maxillofacial Injury x2
- Open Fracture Ulna
- Open Fracture Humerus
- Small Sucking Chest Wound
- Large Sucking Chest Wound
- Gunshot Entrance - 7.62
- Gunshot Entrance - 5.56
- Gunshot Exit - 5.56
- Blister Cluster
- Partial Right Foot Amputation Sleeve
- Partial Left Hand Amputation Sleeve
- HRMK Case
- Alcohol Paint Set
- Brush Set
- Color Set Powder 2 oz
- Fixer Spray - 4 oz
- Wound Adhesive - 4 oz
- Shrapnel Kit
- 99% Alcohol - 8 oz
- Blast Powder 2 oz
- Injury Reference Cards
- Skin FX A/B Combo Set
- Instruction Booklet
- Stainless Steel Pallet
- Cotton Swab Packs x2
- Clean Wipes - 10 count
- Powder Applicator x2
- Wedge Sponge x8
- Scissors
- 1 Tweezer
- 25 Disposable Spatulas
- Sharpies x3
- Expo Pens x2
- Mechanical Pencils x2
- Spray Bottles - 1 oz x2

HYPER-REALISTIC MOULAGE KIT (HRMK)

> SKIN 101

A person's skin is made up of three layers:

- **THE EPIDERMIS** – The outer layer of the skin, creating a tough, renewable, waterproof barrier against the environment.
- **THE DERMIS** – The second layer of the skin that consists of various connective tissues. In the dermis, we find capillaries and many nerve endings.
- **THE SUBCUTANEOUS LAYER** – The innermost (deepest) layer of the skin. The subcutaneous layer contains fat and connective tissue that houses all the larger blood vessels and nerves.

Proper Skin Care

When dealing with a person's skin, it is important to have an understanding of proper skin care, as well as skin safety. All products provided in the Hyper-Realistic® Moulage Kit (HRMK) are safe for use on the skin. However, ensuring proper skin care is the responsibility of the Makeup Artist. Some individuals may have more sensitive skin than others; therefore, it is important to be aware of how to care for the skin and what signs to look for.

- Communication is key – Ask the individual you are working on if they have any skin sensitivities or allergies. Always try to know the skin type with which you are working.
- If the skin is naturally dry, avoid the use of alcohol based cleansers.
- If the skin is naturally oily, use a cleanser with a lower pH level.
- For sensitive skin, use a basic cleanser that is free from fragrances and additives.

All skin types require a thorough cleaning which should penetrate the pores to stop dirt reaching below the epidermis. The cleaning should be done with an oil-based cleanser, as water alone will not reach into the pores.

Skin Safety

Some materials used in special effects makeup can be harsh or damaging to the skin. A good place to test makeup and removers is on the back of the hand. When removing makeup or appliances, proceed with care:

- Do not pull the appliance off the skin.
- Avoid rubbing the skin aggressively.
- Take plenty of time for the removal process.

Always treat the individual's skin as gently and with as much care as you would treat your own skin.



IMPORTANT!

It is recommended to practice makeup techniques on yourself before applying them to another person. This allows you to gain first-hand experience of what the process feels like, ensuring greater care and understanding when working on others.

Reel Creations™ Traumatic Wound Effects Colors

The Reel Creations™ Traumatic Wound Effects Paint Palette was created in the form of a paint box for the makeup artist who needs many colors available without the inconvenience of open bottles in a confined space. Reel Creations™ Traumatic Wound Effect colors are long-lasting, water-resistant, do not require constant touch-ups, and easily activated with 99% Isopropanol alcohol.



IMPORTANT!

70% Isopropanol alcohol (rubbing alcohol) commonly found in drugstore first aid sections is not recommended due to its 30% water content. The cosmetic resins found in the Reel Creations™ Traumatic Wound Effect Paint Palette will repel water and will not allow colors to dissolve when using 70% Isopropanol alcohol.

Before applying the Reel Creations™ Traumatic Wound Effects Paint Palette, make sure the skin is thoroughly clean.

- Best method: Wash with soap and water, followed by an alcohol wipe.
- Acceptable method: Alcohol alone may be used, but it will not clean the skin as effectively as soap and water.
- Avoid oils: Oil (i.e. body oils, moisturizers, and sunscreens) will interfere with the paint palette colors, causing them to dissolve and significantly reducing their longevity.

The paint palette colors are activated with 99% Isopropanol alcohol using an alcohol spray bottle. Once activated, use a brush or sponge by directly grabbing the color and applying to the skin, appliance, or metal mixing palette. Your HRMK metal mixing palette can be used to create different colors when working with your alcohol paints. The product dries quickly, so the trick to an even application is to keep your applicator moist. Do not try and apply color in one area over and over before the color has had a chance to dry. This causes the color to appear thin in the center and creates a ring around the area you are working.



HYPER-REALISTIC MOULAGE KIT (HRMK)

Work the color by moving your applicator to new areas, then come back and reapply to the areas that are dry in order to make them denser. Use a hair dryer (in cold environments) for faster drying.



WARNING!

99% Isopropanol alcohol is flammable; Always use in a well-ventilated area. 99% Isopropanol alcohol may cause drying of the skin. If drying occurs, discontinue use and apply a topical moisturizer. This usually occurs after repeated applications and removal within a short period of time.

Special Effects (SFX) Blood Kit

Arterial Blood

Instructions for Mixture:

- Mix 8 oz. blood concentrate with 1/4 cup distilled water.

SFX Blood

Instructions for Mixture:

- Concentrate only.

BPS Blood

Instructions for Mixture:

- 1:4 Mix Ratio.
- Mix 8 oz. blood concentrate with 1 gallon of distilled water.



NOTE:

The ingredients used in this product meet with the highest standards of quality. However, as with most cosmetics, certain individuals may experience instances of sensitivity. If this occurs, discontinue use immediately.



IMPORTANT!

Do not ingest. Keep out of reach of children. Avoid eye contact. If eye contact occurs, flush immediately with water.

HYPER-REALISTIC MOULAGE KIT (HRMK)

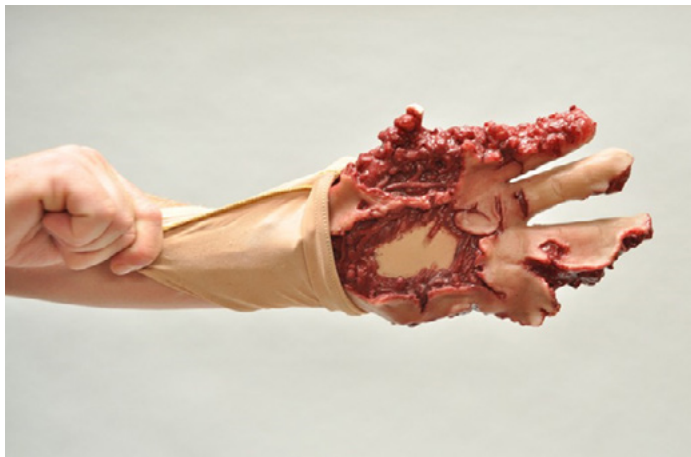
Partial Amputated Hand Glove



Apply color set powder to patient's/actor's hand prior to putting on the partial amputated hand glove.



Powder the inside sleeve of the glove.



Slide the glove onto the patient's/actor's hand with the sleeve inside out. When the hand is secure inside the glove, pull the sleeve down over the forearm.



Apply SFX blood liberally around the blasted hand to finish the makeup effect.



Rinse the glove in cold water after use to prevent staining.

HYPER-REALISTIC MOULAGE KIT (HRMK)

Partial Amputated Foot Sock



Apply color set powder to patient's/actor's foot prior to putting on the partial amputated foot sock.



Powder the inside of the sleeve.



Slide the sleeve onto the patient's/actor's foot with the sleeve inside out. When the foot is secure inside, pull the sleeve up over the leg.



Dust wound pattern with blast powder to achieve the desired effect.



Apply SFX blood liberally around the blasted area.



Rinse the sleeve in cold water after use to prevent staining.

HYPER-REALISTIC MOULAGE KIT (HRMK)

> APPLYING PROSTHETIC WOUNDS

Before you begin the application process, it is important to have a plan. Each specific scenario will dictate the wound patterns you are looking to achieve. Once you have a clear understanding of the experience you are trying to give to the training audience, you are ready to begin. When picking the wounds be sure they fit appropriately on the desired area of the individual's body before you apply primer and adhesive to the wound. Avoid putting the appliance on natural folds or bends on the body. This can cause wrinkling of the appliance and reduce the realism of the effect.

There are several makeup appliance adhesives in the industry. Prosaide is the adhesive used with the HRMK. Prosaide is the industry standard for use in the professional medical prosthetic and special effects makeup industries. Prosaide is specifically formulated for sensitive skin and is non-irritating. All Prosaide products are water-based and completely safe. When dry, Prosaide adhesive gives absolute waterproof bonds to all skin surfaces. It is safe on the skin, while providing the durability needed to get through any training scenario, in any environment. In the instance the adhesion is not sufficient for the application, Aphix primer can be applied to prosthetic before Prosaide application. See Appendix A for application and product details.

Wound Design

When designing a wound, start by asking yourself key questions to ensure realism and accuracy for the training scenario:

- Cause of Injury: How did the wound happen? (e.g., blast injury, building collapse, gunshot).
- Gunshot Details (if applicable):
 - What caliber is the gunshot?
 - What entrance and exit pattern are you creating?
 - From what direction was the shot fired?
- Severity: Is the wound fatal or survivable?
- Age of Wound: How old is the wound?



IMPORTANT!

Depending on when the wound was sustained will greatly influence the colors used in the application.

Alternative Wounds

The HRMK is designed to create a variety of wound patterns. The appliances found in your HRMK cover broken bones, 1st, 2nd, 3rd degree burns, ocular trauma, evisceration of the bowels, and arm deformity. Included in the HRMK is the Skin FX, which allows the Makeup Artist to create alternative wounds other than the silicone appliances. With the Skin FX and paint palette, the Makeup Artist has the tools to sculpt any desired trauma or effect needed to achieve optimal training.

Coloring The Appliance

The appliances used in the HRMK come pre-painted. This allows the Makeup Artist to focus on blending the wound into the skin and moving quickly from one individual to the next. In most cases, the wound simply can be applied and accentuated with minimal blood to create the effect. Depending on the wound, the paint palette can only improve the look. The paint palette can be used in wash layers to give an effect of irritation around the wound, or the pigment can be mixed into one of the 1-ounce spray bottles to give a quick color change.

HYPER-REALISTIC MOULAGE KIT (HRMK)

HRMK Wound Prosthetic Application Process



Start with paint palette, wound adhesive, cotton swabs, blood, brushes, makeup wedges, scissors, and desired appliance.



Remove the appliance and using a cotton swab, apply a small amount of wound adhesive to the underside. Do not apply any adhesive near the edge of the appliance at this time.



Position the appliance on the individual and press it into place.



Using scissors, trim the outside band away from the appliance, leaving a seamless edge.



Lift an edge of the appliance and apply wound adhesive with a cotton swab to the underside edge of the appliance.



With a cotton swab, reapply wound adhesive as necessary to ensure the appliance is fully secured to the individual's skin.



IMPORTANT!

Apply glass shrapnel or faux metal shrapnel to the prosthetic with wound adhesive or Skin FX A/B mixture if needed for training.

HYPER-REALISTIC MOULAGE KIT (HRMK)



Use 99% Isopropanol alcohol to activate the colors in the paint palette. Applying alcohol paint in a wash method, allowing you to gradually build color to enhance the appliance. Add a small amount of alcohol pigment to a filled 1-ounce alcohol spray bottle to cover larger areas.



Use brushes or sponge applicators to apply color from palette directly to the individual's skin or the appliance.



Apply SFX blood to finish the effect.



Finished wound appliance.

HYPER-REALISTIC MOULAGE KIT (HRMK)

Application for Extra Orbital Evulsion



You will need wound adhesive, scissors, cotton swabs, color set powder, paint palette, brushes, and a folded 1-inch by 1-inch square piece of paper towel.



Remove the appliance and put a small amount of wound adhesive on the underside with a cotton swab. Do not apply any adhesive near the edge of the appliance at this time.



Place the folded paper towel over the "injured" eye and position the appliance on the individual and press it into place.



Using scissors, trim the outside band away from the appliance leaving a seamless edge.



Lift an edge of the appliance and apply wound adhesive with a cotton swab to the underside edge of the appliance.



Lightly dust the outside edge of the appliance with color set powder. Avoid over-powdering.

HYPER-REALISTIC MOULAGE KIT (HRMK)



Use 99% Isopropanol alcohol to activate the colors in the paint palette. Applying alcohol paint in a wash method, allowing you to gradually build color to enhance the appliance. Add a small amount of alcohol pigment to a filled 1oz. alcohol spray bottle to cover larger areas.



Use brushes or sponge applicators to apply color from palette directly to the individual's skin or the appliance.



Apply blast powder and SFX blood to finish the effect.

HYPER-REALISTIC MOULAGE KIT (HRMK)

Application for Eviscerated Bowel



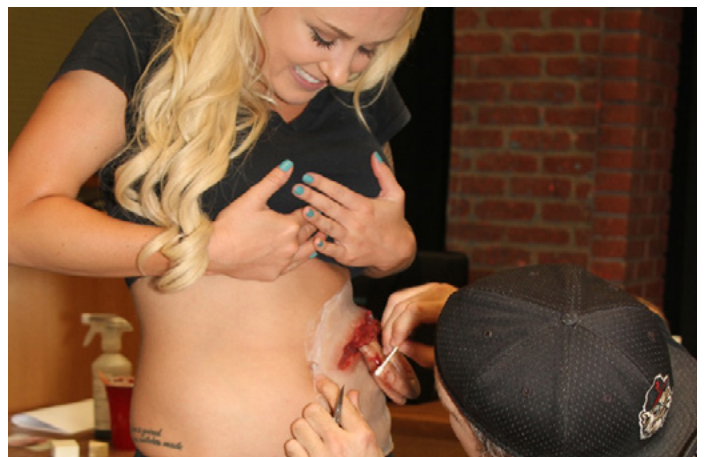
Cover the backside of the appliance with the wound adhesive. Be mindful not to apply too much adhesive. Too much will add to the dry time of the appliance application. The adhesive should be applied in a thin layer and allowed to dry clear and tacky.



Using a baby wipe, clean the application area where the eviscerated bowel will be attached.



Once the adhesive is tacky, place the eviscerated bowel on the body.



Using scissors, trim the outside band away from the appliance leaving a seamless edge on the wound appliance.



Powder the outside edge of the appliance.



Using the paint palette, begin to color the appliance to blend and match the wound effect to the patient's/actor's skin.

HYPER-REALISTIC MOULAGE KIT (HRMK)



Keep layering the colors until you achieve the desired match and realism.



Use a makeup wedge to spread the alcohol paint more efficiently over larger areas.



Add wardrobe, SFX blood, and blast powder to finish the effect.

HYPER-REALISTIC MOULAGE KIT (HRMK)

> SKIN FX

Skin FX A/B is skin-safe, brush-on, fast-curing, translucent platinum room temperature vulcanization (RTV) silicone, designed to produce appliances for makeup effects, theatrical, and novelty applications. Skin FX has a 1 to 1 mixing ratio with a quick curing time making it easy to create a last-minute wound. Cured pieces will naturally adhere to skin, but a wound adhesive is recommended for best adhesion.

Skin FX is made of two components, A and B. When Skin A and Skin B are mixed they create a skin texture that can be manipulated into any shape and hold that form once cured. Skin FX can be applied directly to the skin or on the metal palette to sculpt and create an effect that can be applied at a later time.

When applying Skin FX directly to the skin an adhesive is not necessary. The Skin FX will adhere to the skin and uphold the same durability as the silicone appliance. If creating a wound to be used later on your metal palette, you will need to use wound adhesive during the application process, following the same steps used with the silicone appliances. Use the same method for painting with your paint palette to complete the effect.

Cure Inhibition of Skin FX

Certain materials will cause inhibition or neutralization of the curing agent. Inhibition may easily be determined by brushing a small quantity of material over a localized area of the surface to be reproduced. If the material is gummy or uncured after the curing time, then the contacting surface is acting as an inhibitor.



Mix & Cure Instructions for Skin FX

This product is designed to be mixed in the ratio of 1 part by weight of cross-linker to 1 part by weight of base, but visual estimation of proportions is usually sufficient. Measure out the desired quantities of respective components and blend thoroughly. For best results, perform a second mix in a clean container to ensure uniformity. Do not prepare more material than can be applied within 2 minutes, as the working time is approximately 5 minutes. Immediately after mixing, brush or trowel the material onto desired surface. Temperatures will affect the dry time. Heat from a hair dryer can be used to accelerate the drying time. Requirements for cure are dependent on the particular application and should be determined by the user. Use tear-less baby shampoo as a release agent (skin safe) around hairy areas when needed. This is a platinum-based system and certain materials will cause contamination, resulting in a gummy or sticky surface.

Consistency, Mixed	Creamy Paste
Mix Ratio: By Weight	1 Part A; 1 Part B
Gel Time	3 min
Cure Time	5 min* On Body
Color, Mixed	Flesh
Hardness, Shore A	15
Viscosity, cps	132,000 A / 100,000 B
Shelf Life	6 months

* Values listed are typical and not intended for use in specifications.

Storage/Shelf Life

A / B components must be stored in their original, unopened containers at temperatures between 60–90°F (15–32°C). When kept sealed and stored under the recommended conditions, the materials have an approximate shelf life of 6 months.

HYPER-REALISTIC MOULAGE KIT (HRMK)

Application for Skin FX



Start with Skin FX A/B, double-ended spatula, and metal mixing palette.



On the metal mixing palette, combine Skin FX A and B in equal parts using the double-ended spatula.



Spread Skin FX onto the skin in a thin layer.



Once the Skin FX begins to solidify, cut into the center of the material with the double-ended spatula.



Once the Skin FX has fully dried, begin the application of dark colors in the paint palette.



Color the Skin FX wound to the desired level of trauma. Use the wound card as a guide for proper color reference.

HYPER-REALISTIC MOULAGE KIT (HRMK)



Dust blast powder around the edges of the Skin FX wound to create realistic burn or blast effects.



Apply SFX blood to the wound to finish the effect.



Finished wound effect.

Alternative Wound Creations with Skin FX

Cuts and Lacerations

- Mix Skin FX A/B in equal parts and spread onto the skin in a thin layer.
- Blend off the outer edge for a seamless line.
- Once the Skin FX begins to solidify, cut into the center of the material with a disposable spatula.
- Begin sculpting and manipulating product to create desired wound effect.
- Once the Skin FX has fully dried, begin the application of color. Color the material to match the surrounding skin.
- Color the center of the cut line with red or black.
- Apply blood to the cut to finish the effect.

Torn Flesh

- Start by placing Skin FX on the area that is to be torn.
- Distribute the Skin FX evenly so it blends with the surroundings natural skin.
- Using the paint palette, color the Skin FX to create a more realistic look.
- With a disposable spatula, rip, lift, and tear the Skin FX to form an open patch.
- Paint the wound area with bruise tones (purple, red, black).
- Apply SFX blood into the cavity of the wound to create a desired effect.

Cut Throat

- Mix Skin FX and spread onto metal palette or any smooth, flat surface.
- Shape the Skin FX into a wound approximately 3 inches long by 1 inch wide, dragging a spatula tool down the center, opening up the cut-throat trauma.
- Use the paint palette to enhance the look of the cut-throat effect.
- Apply the Skin FX cut-throat appliance with the same techniques used to apply a silicone wound appliance.
- Brush on SFX blood to finish the effect.

HYPER-REALISTIC MOULAGE KIT (HRMK)

➤ REMOVAL, CARE, AND MAINTENANCE OF HRMK APPLIANCE

Removal of Appliance

Makeup removers quickly and thoroughly remove spirit gum, Prosaide adhesive, and similar adhesive residues from the skin and appliance. To remove the silicone appliance, soak the tip of a cotton swab with the makeup remover.



Clean the area around the appliance with a makeup wedge and 99% Isopropanol alcohol.



With the wound adhesive remover, begin to break down the adhesive seal between the wound appliance and the patient's/actor's skin.



Lift an edge of the appliance and carefully insert a cotton swab soaked with makeup remover between the appliance and patient's/actor's skin.



Go slowly, working the cotton swab around the appliance edge.

HYPER-REALISTIC MOULAGE KIT (HRMK)



Keep reapplying makeup remover as needed.



Carefully lift away the appliance. Do not pull or rip the appliance away from the skin too hard or fast.



Use a combination of makeup remover and baby wipes to clean the patient's/actor's skin of all appliance adhesive residue.



To clean the appliance for storage, lay the appliance face down on a flat surface.

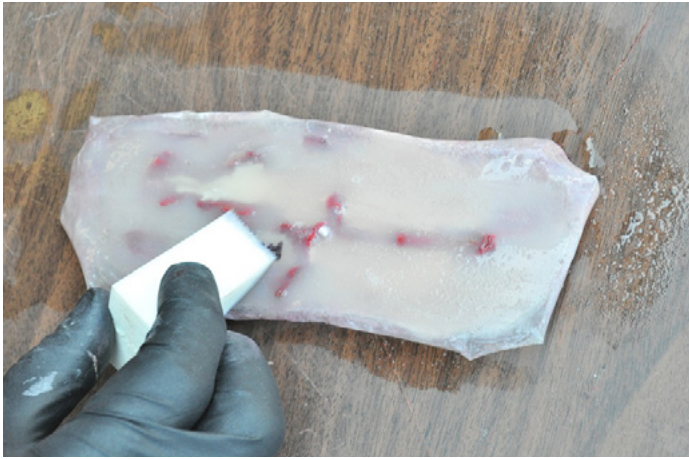


Using a cotton swab, coat the backside of the appliance with makeup remover to clean off adhesive residue. Reapply remover as needed.



Wash away any excess remover and residue with 99% Isopropanol alcohol.

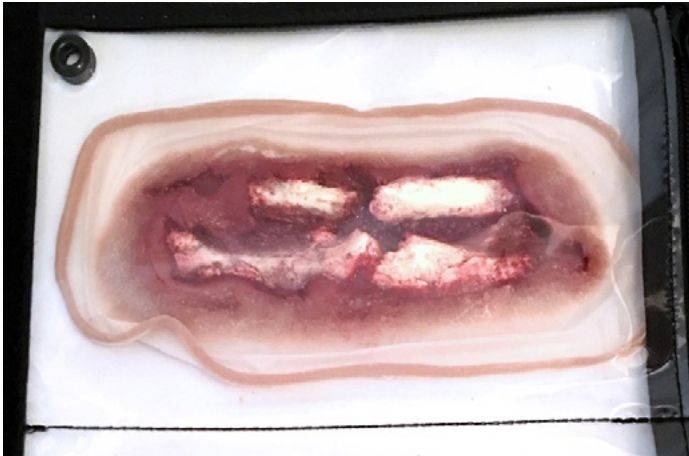
HYPER-REALISTIC MOULAGE KIT (HRMK)



With a new makeup wedge, dry the backside of the appliance.



Lay the appliance wound side up on a paper towel and let air dry for 10–15 minutes.



Once dry, the appliance is ready to be returned to the storage sleeve.

HYPER-REALISTIC MOULAGE KIT (HRMK)

> APPENDIX A

APHIX Application and Product Information

APHIX Silicone Adhesion Promoter will temporarily adhere most surgical tapes, bandages, dressings, etc. to silicone rubber surfaces, including training mannequins, devices, etc.

This non-VOC formula is a low-viscosity liquid that brushes on easily and dries quickly. A single application lasts for repeated use.

APHIX Silicone Adhesion Promoter can be removed with the 99% Alcohol provided with this kit.



Clean the back of the wound thoroughly with 99% Alcohol.



Shake the APHIX bottle well before use. Pour a small amount of APHIX into a CC Cup and using a cotton swab apply to the back of the appliance. Let dry for ten minutes. A layer of Prosaide can then be applied.

HYPER-REALISTIC MOULAGE KIT (HRMK)

➤ NOTES

HYPER-REALISTIC MOULAGE KIT (HRMK)

➤ NOTES

HYPER-REALISTIC MOULAGE KIT (HRMK)

> CONTACT INFORMATION



3B Scientific GmbH
Ludwig-Erhard-Straße 20 • 20459 Hamburg • Germany
Phone: + 49 (0)40-73966-0 • Fax: + 49 (0)40-73966-100
3bscientific.com • info@3bscientific.com