HX-974™ White Mold Making Latex

HOLDEN'S LATEX

PRODUCT OVERVIEW

HX-974™ White Brushable Mold Making Latex is a newly developed vulcanizable, latex made especially for vertical surface applications. With a higher viscosity than HX-80, this product is ideal for making glove molds of 3-dimensional originals such as statuary. **NOTE: Latex can be used for limited casting of some resins. The higher the exotherm of the casting material, the quicker the mold will degrade and become unusable. Mold Max™ silicone rubbers would be a better choice for production casting of resins.**

PROCESSING RECOMMENDATIONS

GENERAL PREPARATION:

Do not allow* HX-974™ White *to freeze. The material will not be usable. Store and use material at room temperature (73°F/23°C). This product has a limited shelf life and should be used as soon as possible. Colder temperatures will increase the working/cure time, while warmer temperatures will reduce working time. Wear safety glasses, long sleeves and rubber gloves to minimize contamination risk.

PREPARING THE MODEL:

The model should be free of any contaminants, including oil, grease and dirt. Most models do not require a sealer or release agent prior to applying **HX-974™ White**. Models containing sulfur must be sealed (such as sulfur-based clays). If unsure of how well latex will release from the model, a small-scale test should be performed by applying a coat or two of latex to an inconspicuous area. **Applying a Sealing Agent** - if the rubber sticks to the model surface or turns dark after the small scale test, apply a sealer. **Holden's HX Barrier Coat™** or **ZINSSER® Bulls Eye Spray Shellac®** should be applied to the model's surface and allowed to thoroughly dry before applying rubber. Secure your model to a firm, flat, non-porous surface (baseboard) prior to applying rubber. Level in all directions.

PRODUCT PREPARATION:

HX-974™ White latex rubber is one component. After opening, an option would be to decant into a smaller plastic container to make your working quantity more manageable and easier to handle.

APPLYING, CURING & PERFORMANCE:

APPLYING THE RUBBER:

Stipple the initial layer as thin as possible onto the model. Work the latex into all detail, do not allow it to pool. If there is pooling after the first layer is brushed on, dab the pools with a brush to help remove excess latex and prevent bubbles from forming. At the bottom edge of the model (where the model meets the baseboard), create a wide and even flange of latex rubber around the perimeter. The flange will help the rubber mold register with the support shell. Applying layers of rubber in even, uniform layers will result in a dimensionally stable mold. Following the first layer, additional layers should be applied when the previous layer is tacky (generally within 1-4 hours between coats depending on ambient temperature, humidity and thickness of the rubber.) Do not allow previous layer to fully cure which may result in delamination. Layers should be applied by alternating brushing direction for each layer. (This method reduces stress and warping of the latex as it dries.) Apply as many layers as needed (minimum 10 layers) to achieve a thickness of 1/16" (0.16 cm) for smaller items, and 1/8" (0.32 cm) for larger items.

SAFETY FIRST

The Safety Data Sheet (SDS) for this or any Holden's Latex product should be read prior to use and is available upon request from Holden's Latex. All Holden's Latex products are safe to use if directions are read and followed carefully.

Keep Out of Reach of Children

BE CAREFUL - Avoid use if you have known allergies to natural latex. Avoid contact with eyes. Flush eyes with water for 15 minutes and seek medical attention. Remove from skin with waterless hand cleaner followed by soap and water. Children should not use this product without adult supervision.

IMPORTANT - The information contained in this bulletin is considered accurate. However, no warranty is expressed or implied regarding the accuracy of the data, the results to be obtained from the use thereof, or that any such use will not infringe upon a patent. User shall determine the suitability of the product for the intended application and assume all risk and liability whatsoever in connection therewith

SPECIFICATIONS:

% Solids: 56-60% | **Specific Gravity:** 0.95
Viscosity: 7,000-9,000 cps
Base Latex Metals Content:
< 8 ppm Copper, < 8 ppm Manganese
Potassium Hydroxide (KOH): 0.80
Mechanical Stability: 650 seconds
Shrinkage: 5-10% during drying process

ACCESSORIES:

Sealers & Release Agents:
HX-Barrier Coat™ | HX-Castor™ Oil

Thickening Agent: HX-CECO Powder™

Colorants: Fabtone™ Latex Colors

OPTIONAL - Thickening the Rubber:
After the 4th layer, latex can be thickened with **HX-CECO™** Powder to fill in undercuts and deep detail, especially at the edges of the model or for faster mold build-up. Thickened latex must be allowed to dry completely as wet spots trapped in the latex can cause delamination (generally 8-10 hours between thickened coat depending on thickness and amount of **HX-CECO™** powder added)
NOTE: Thickened rubber loses some of it's elasticity and tear strength can be affected.

OPTIONAL - Reinforcing the Rubber:
If needed, the latex can be reinforced by embedding fabric into a coat of wet latex and then saturated with more latex to encapsulate it (usually after the 6th layer). Adding fabric to the latex may limit the latex's ability to stretch depending on the fabric. Typical uses would be around the flange or in between layers of a large flat mold where dimensional stability is more important than the latex's natural ability to stretch. Examples of materials that can be used include, fine mesh burlap, cheese cloth & muslin.

CURING THE RUBBER:
Full cure occurs after 7 days at room temperature (73°F/ 23°C) This depends on temperature, humidity and thickness. ***For faster curing: heat the rubber in a dedicated oven or hot box (Do not use home oven) between 110°F (43°C) and 120°F (49°C) for a period of 8-12 hours to reach full cure.***

APPLYING A SUPPORT SHELL:
Once the mold is fully cured, a rigid support shell (mother mold) is necessary to support the rubber mold during casting. Before applying the support shell, brush the cured latex with **HX-Barrier Coat™**. **Plasti-Paste™** brushable urethane plastic, gypsum and PVA fibers or other reinforcement are commonly used. Polyester and fiberglass cloth can also be used.

USING THE MOLD:
Avoid exposing the mold to oils (exception is **HX-Castor™ Oil**), grease or solvents. Molds may be washed with soap and water. For best results when casting plaster, wet the mold with a 1% solution of detergent in water to aid releasing air bubbles from the mold surface; no other release is usually necessary. If casting Concrete, use **HX-Castor™ Oil** on the surface of the mold prior to casting concrete in the mold.

MOLD PERFORMANCE & STORAGE:
The physical life of the mold depends on how you use it (materials cast, frequency, etc.). Casting resins or other materials with a high exotherm in the mold will quickly deteriorate the mold. Before storing, the mold should be cleaned with a soap solution and wiped fully dry. Store finished latex molds away from UV light and excessive heat (>120°F, 49C). Ensure that molds are completely dry before storing. For best results, store molds with a gypsum casting in them to help retain their shape.

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