

## #86590 Formula X7 Casting Foam Instructions for Use

***IMPORTANT: KEEP THIS SHEET FOR FUTURE REFERENCE***

### PRODUCT OVERVIEW

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Formula X7 Casting Foam makes lightweight, flexible castings for a variety of art, model making, and industrial applications. It's strong, bendable, tear-resistant, and self-skinning, which means the cured foam forms a continuous, high-density skin that can be painted and weathered. Natural color is white, but vibrant colors can be achieved by adding color pigments. Mix ratio is a convenient 1 part A to 2 parts B by volume. Pot life is 60 seconds; de-mold in 2 hours. Expands to approximately 3.5 times its original volume. Each pound of mixed material makes 100 cu in. of foam.

### PREPARATION

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Store and use at room temperature (73°F/23°C). Good ventilation is essential. This product has a limited shelf life and should be used as soon as possible, especially once opened. **Wear safety glasses, long sleeves and vinyl gloves (not latex) to minimize contamination risk.** Because no two applications are quite the same, a small test application to determine suitability for your project is recommended if performance of this material is in question.

### PRE-MIXING & MIXING

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Separately pre-mix Part A and Part B by stirring and/or shaking both bottles THOROUGHLY before dispensing.

Measuring – The mix ratio for Formula X7 is 1 part A to 2 parts B by volume. Using graduated containers, pour out the desired amount of Part A into the first container, then pour out twice that amount of Part B into a second container. For best results, re-mix Part B thoroughly after measuring out material.

Now combine Part A with Part B in one large mixing container.

For best results, stir quickly and deliberately to completely blend Part A and Part B, almost whipping the material, for a minimum of 15 seconds. Make sure that you aggressively scrape the sides and bottom of your mixing container several times. Pour the mixture into a mold or form.

Be careful not to splash the resulting low-viscosity liquid out of container. Remember, these materials cure quickly. Do not delay between mixing and pouring.

### APPLYING A RELEASE AGENT

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Urethane foams are adhesive and will stick to / bond to many surfaces. We recommend #86627 Ease Release<sup>®</sup> 2831, available separately, to release urethane foam from most surfaces. **Do not use any other mold release products, or any silicone based release agents. This will collapse the foam.**

### POURING & CURING

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For best results, pour your mixture in a single spot at the lowest point of the containment field and let the mixture seek its level. Allow space in the containment field for the foam to grow as it expands to its ultimate volume (3.5 times the original volume). Allow foam to cure for at least 30 minutes before handling. Cure time will be affected by mass and mold configuration.

Improving Surface Finish & Minimizing Voids With Back Pressure – Select a board that is larger overall than your mold and completely covers the mold opening, then drill a few holes (no less than 1/4" diameter) in it. Make sure that when the board is placed over the mold opening, the holes are over the mold cavity and the expanding foam will be able to expand through the holes. Apply Ease Release 2831 generously to the board and into the drilled holes. Mix and pour Formula X7 into the mold cavity and place board over mold opening. Secure board firmly in place. As foam rises in the mold cavity, some foam will expand out of the drilled holes. After the foam stops growing, you can let go of the board. Do not handle for at least 30 minutes. After 30 minutes, you can then cut excess material that came through holes and gently remove board and casting.

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## PERFORMANCE

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Is your foam collapsing? This is a common phenomenon associated with cold temperatures, inadequate mixing or both. Is your environment or material too cold? Allow materials to warm to room temperature (73°F/23°C), and work in a warm area. Inadequate mixing? You **MUST** thoroughly pre-mix both Part A and Part B. After combining Part A and Part B, mix quickly and aggressively for a minimum of 15 seconds, almost whipping the material, to completely blend them together.

## WARNINGS

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### **KEEP OUT OF REACH OF CHILDREN.**

Be careful. **Wear safety glasses, long sleeves and vinyl gloves (not latex) to minimize contamination risk.** Part A contains methylene diphenyldiisocyanate. Vapors from this chemical, which can be significant if heated or sprayed, may cause lung damage and sensitization. Use only with adequate ventilation. Contact with skin and eyes may cause severe irritation. Flush eyes with water for 15 minutes and get immediate medical attention. Remove from skin with soap and water. Part B is irritating to the eyes and skin. Avoid prolonged or repeated skin contact. If contaminated, flush eyes with water for 15 minutes and get immediate medical attention. Remove from skin with soap and water. When mixing with Part A, follow precautions for handling isocyanates. If machining cured Formula X7, wear a dust mask or other apparatus to prevent inhalation of residual particles.

## **PRODUCT LIABILITY DISCLAIMER**

Micro-Mark makes no warranty of any kind, expressed or implied in respect to this product.  
Buyer assumes all risk and liability whatsoever resulting from use of this product.