



Por-A-Kast

INTRODUCTION AND HOW TO USE

PRODUCT BULLETIN # 89.01

POR-A-KAST IS A ROOM TEMPERATURE CURED PRODUCT (72°F-75°F). It is a two-component liquid urethane casting system designed for use by art schools, sculptors, wood carvers, pattern makers, taxidermists and others. Blended in a one-to-one ratio by volume, it requires no weighing to provide castings of superior quality and high fidelity.

The Por-A-Kast System is blended on a one-to-one ratio by volume to ensure ease of use. This means you mix one cup of Side "A" to one cup of Side "B". No weighing!! The elimination of the need for accurate weighing removes the possibility of error that can result in the loss of materials, castings and molds.

The Por-A-Kast System can be hand mixed. Just dispense equal amounts of Side "A" and Side "B" into separate clean plastic containers. Add the filler in a ratio of one part filler to one part resin by volume. Premix the filler into Side "A" and Side "B" prior to mixing Sides "A" and "B" together. Now pour Sides "A" and "B" together into a third clean plastic container and mix together for 30 seconds. For small amounts you can use a dry wood or metal spatula. For larger amounts use a jiffy mixer in a small hand drill. When mixing avoid air bubbles!! Mix for 30 seconds and pour immediately into a rigid or flexible mold that will not leak. Be sure the mold has been coated with the proper mold release agent.

The addition of the filler reduces the weight and cost of the system and doubles the volume. You may adjust the amount of filler to achieve different results in your castings or leave the filler out completely.

We suggest that you try a test casting in small quantities to familiarize yourself with gel times and other procedures. Note: The resin gel time and the demold time can be doubled if the resin temperature is lowered to about 40°F but must be stirred prior to using.

After pouring, do not disturb the resin after it starts to gel. Demold time can be from 8 to 15 minutes depending on room temperature. It is important to use eye protection when mixing and pouring. Be sure ventilation is adequate to remove fumes from the casting area. After the part has been demolded you may want to leave it overnight before continuing. The part can be used within one hour but the ultimate and complete cure occurs in 36 hours.

Por-A-Kast can be sanded, cut, drilled, or bonded. It can be stained or painted if the surface has been prepared by degreasing or removing any remaining oil, grease, dirt or release agents.

MOISTURE CONTAMINATION

Por-A-Kast, like all urethane systems, is very sensitive to moisture!! It will react to moisture to form carbon dioxide gas which, on expansion, causes the resin to foam at point of contact with the moist area. Por-A-Kast is a balanced formula and requires equal parts of curative and polyol. If a portion of the polyol reacts with moisture, it is not available to combine with the curative, resulting in uncured castings.

Precautions should be taken to avoid contamination of Por-A-Kast. Do not open the containers other than to pour the resins into your mixing containers. Reseal the resin containers immediately after using!! The opening and closing of the resin containers in areas of high humidity may contaminate Por-A-Kast.

RELEASE AGENTS

If your molds require release agents, a release agent should be used that can be applied in a thin film so as to not destroy the integrity of the surface to be reproduced. Por-A-Kast will reproduce the finest details contained in the mold. If the release agent is applied in thick uneven layers with visible application lines or marks, they will be reproduced in the casting. We recommend that you test any release agent you select for compatibility with Por-A-Kast and its releasing ability with your molding material.

BE SURE TO READ THE MATERIAL SAFETY DATA SHEET ENCLOSED WITH YOUR PRODUCT

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CAUTION

Por-A-Kast contains polymeric isocyanates and polyether resins which may cause irritation to the eyes, skin, or upper respiratory tract. Always maintain proper ventilation in the work area. Wear protective clothing and safety glasses when mixing, pouring, or cutting the material. Should irritation occur, stop working with the material immediately. For eye contact, flush eyes with water, wash skin with soap and water and seek medical attention. Workers who are allergic to urethane resins should not work with this material without using a full face, pressure demand respirator. This material can burn!!! After cutting or machining this material, dispose of all shavings in a fire safe metal container.

WARRANTY

No warranty of Por-A-Kast is expressed or implied. The user assumes all responsibility for its use and the suitability of the product for whatever application is intended.

The conditions for your use and application of our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested formulations and recommendations, are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether they are suitable for your intended uses and applications. This application-specific analysis at least must include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been done by PUMA Polymers. All information is given without warranty or guarantee. It is expressly understood and agreed that customer assumes and hereby expressly releases PUMA Polymers from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance and information. Any statement or recommendation not contained herein is unauthorized and shall not bind PUMA Polymers. Nothing herein shall be construed as a recommendation to use any product in conflict with patents covering any material or its use. No license is implied or in fact granted under the claims of any patent. PUMA Polymers, Por-A-Kast[®], Updated March 3, 2009

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