



BabyGel™ 2 Alginate

Alginate for Making Molds of a Baby's / Child's Hand or Foot

Accu-Cast™ BabyGel™ 2 alginate is a fast curing, skin safe alginate mold material that is ideal for making accurate reproductions of your baby's / child's hand or foot. BabyGel™ 2 is unique among other alginates in that, when mixed with water at 80°F/27°C, it changes color from pink to light grey as it cures. This visual indicator makes it easy to determine when to insert the baby's / child's hand or foot into the mold gel. Mold will cure in about 3 minutes. You can cast LiquiStone™ plaster into the mold to make a reproduction.

TECHNICAL OVERVIEW

Accu-Cast™ BabyGel™ 2 Alginate Specifications

Mix Ratio by Volume: 1 part powder to 1 part water by volume

Mix Ratio by Weight: 1 part powder to 4 parts water by weight

Specific Volume: 26 cu. in./lb

Pot Life: 2 minutes*

Cure Time: 3 minutes*

Color Change: Pink to Light Grey

*Depending on water quality (–see “Water Quality” section below) and water temperature set to 80°F/27°C

PROCESSING RECOMMENDATIONS

Safety - Wear safety glasses to minimize contamination risk. Use only in a well-ventilated area.

Preparation - These products have a limited shelf life and should be used as soon as possible. Materials should be stored and used in a warm environment (73°F/23°C). Mixing containers should have straight sides and a flat bottom. Mixing sticks should be flat and stiff with defined edges for scraping the sides and bottom of your mixing container. BabyGel™ 2 powder may get warm in storage/shipping during the summer months which may cause the powder/water mixture to set too fast. To remedy, store BabyGel™ 2 alginate in a cool area (60°F - 70°F or 16°C - 21°C) for 24 hours before using. Do not allow moisture to come into contact with unused BabyGel™ 2 alginate powder.

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.

Measuring, Water Quality and Water Temperature

Measuring - BabyGel™ 2 is mixed 1 part powder to 4 parts water by weight or 1 part powder to 1 part water by volume. If measuring by volume, fill measuring cup with powder, and level off the top. If measuring by weight, use an accurate gram scale. You can vary the water level somewhat to change the consistency of the mixture. Less water will make the alginate thicker. More water will make the mixture thinner and easier to pour.

Be Careful... too much water may result in the mixture not curing!

Water Quality - If water quality is in question, use distilled water heated to the correct temperature using a stove top or microwave oven if needed. Check water temperature using a thermometer. Water that has a high mineral content (calcium, phosphate, etc.) may cause any alginate to become “lumpy” or not set properly. If you have a water softener, the water will delay the pot life and cure time of the alginate. You can compensate for this by increasing the temperature of the water. A small-scale test is recommended prior to mixing large amounts.

Water Temperature - At 80° F / 27° C, BabyGel™ 2 will have a working time of approximately 2 minutes and a demold time of about 3 minutes. Warmer water will cause the material to cure faster (less working time). Colder water will give a longer working time and slower demold time.

Mixing Alginate

Mixing - Alginate can be mixed by hand in a mixing container using a flat mixing stick with defined edges for scraping the sides and bottom of your mixing container as you mix. Review the “hand mix” technique video at www.accu-cast.us/alginatehandmix. Alginate material can also be mixed in the bag it comes in. Remove all jewelry and watches from hands before attempting to mix the material in the bag to prevent puncture to the bag. Review the “mix-in-bag” mix technique video at www.accu-cast.us/alginatemixinbag. Alternatively, you can mix the material using a turbine mixer (mechanical mixer) and portable drill. Review the “drill mix” technique video at www.accu-cast.us/alginatedrillmix.

Immerse a Model into Alginate

Immerse a Hand or Foot-Once mixed, BabyGel™ 2 can be poured into a container for making a mold. Immerse a hand or foot model just above the bottom of the container and have at least ½” (1.27 cm) space between the model and the side walls of the container. Immerse the baby or child’s hand or foot into the alginate when it changes from pink to light grey. **After the BabyGel™ 2 turns light grey, you will have about 60 seconds until the mold becomes firm.**

For Best Results: Thoroughly wet the model in water before immersing into the alginate. After immersing the model into the alginate, lift the model up from the alginate briefly and then reimmerse model back into the alginate. Keep your model still until the BabyGel™ 2 sets up. You will know the alginate has set when it is totally light grey in color, firm and no longer gel-like.

Curing

Cure time is approximately 3 minutes when mixed with water at 80°F / 27°C. Material mixed with more water will have a thinner consistency and may take longer to set up. Cured alginate molds exhibit moderate tear strength and are firm but flexible.

Casting into the Mold

Since all alginate molds will deteriorate quickly, molds made with alginate materials can be used for making a single life cast reproduction. It is recommended that you cast into the mold within 4 hours following demold. Materials commonly cast into alginates include LiquiStone™ Gypsum Cement, wax, clay and very fast urethane resins (such as Smooth-Cast® 300Q). **For Soft “Skin-Like” Castings** you can cast FUN Silicone™ soft silicone rubber into BabyGel™ 2 molds to make realistic hands or other body parts.

Demold

Removing cured castings from the alginate mold- To facilitate demolding, use a plastic knife to carefully score the alginate mold on all sides. Carefully remove small chunks of alginate to reveal the casting.

Safety First!

CAUTION: Do not inhale dust. In case of eye contact, flush thoroughly with water. Children should not use this product without adult supervision.

The International Agency For Research on Cancer (IARC), which is part of the World Health Organization, has rated free crystalline silica a “Group 1” carcinogen, known to cause cancer.

BabyGel™ 2 alginate does not contain free crystalline silica.

Read the Technical Bulletin and MSDS before using this material.

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.



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