



Alginate

Renew[™] Alginate is skin safe and ideal for making “single use” molds of hands, feet or other body parts. Renew Alginate is easy to use (1 part alginate to 1 part water), cures quickly and reproduces fine detail. Once the mold is made, you can then cast plaster, polymer-modified gypsum, or ultra-fast urethane resin into the mold to make a reproduction.

Unlike other alginates, **Renew[™] Alginate does not contain free crystalline silica** (a known carcinogen). Renew Alginate captures detail better and is stronger than other alginates.

Store and use Renew Alginate in a dry environment at room temperature (72° F / 23° C). This material has a limited shelf life and should be used as soon as possible. Do not allow moisture to come into contact with unused alginate. Use only with adequate ventilation. **Practice:** Make a mold of something small (such as your finger) before going on to larger models. **You'll gain a lot of experience with a small test.**

Applying a Release Agent – Renew[™] Alginate will not stick to hair-free skin. It will encapsulate hair, and a release preparation is recommended to prevent mechanical lock. CHOLESTEROL Hair Conditioner (available at most pharmacies) can be applied to hair-covered areas prior to applying alginate. It can be washed out of the hair easily after use. 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 – Renew Alginate is mixed 1 Part warm water to 1 Part alginate by volume. Less water will make alginate thicker; more water will make alginate thinner.

Temperature of the Water / Controlling Working Time - At 80° F / 27° C, Renew[™] Alginate will have a Working Time of 8 minutes and a Cure Time of 10 minutes. Warmer water will cause the material to cure faster (less working time). Colder water will give a longer Working Time and slower Cure Time. For best results, sift alginate powder into water and mix as directed.

Mixing – Renew[™] Alginate can be hand-mixed, but best results will be obtained using a power mixer attachment. Drill mix for best results. Attach a Jiffy Mixer or Squirrel Cage Mixer to a power drill and mix for one minute (depending on volume) to a uniform consistency (smooth without any lumps). Jiffy Mixers are available at many hardware stores.

Applying – Renew[™] Alginate can be poured around an object or applied to vertical surfaces. You may want to experiment with the amount of water added to Renew[™] Alginate to find a thicker consistency that is right for vertical surface application. For example, some customers mix 1 part water to 1.5 parts Alginate. Work the Alginate into model detail with your hands and let cure.

Apply a Support Shell (for vertical surface application) – If making molds of the face or other vertical surfaces, a support shell will be necessary to support the alginate once it has cured. Gypsona plaster bandages are ideal for this purpose.

All alginate molds will deteriorate quickly. It is recommended that you cast into the mold within 4 hours following demold. **For making lasting, re-usable molds** of any body part, use Renew[™] “Replicator” silicone rubber.

Technical Information

Mix Ratio:	1 Part Warm Water (80° F / 27° C)* to 1 Part Renew[™] Alginate Powder by Volume (or 5 Parts Water to 1 Part Renew Alginate by Weight)	
Working Time:	8 Minutes*	<i>*NOTE: Working Time & Cure Time may be reduced by using warmer water.</i>
Cure Time:	10 Minutes	<i>Cooler water will give a longer Working Time and extend the Cure Time.</i>

The Material Safety Data Sheet (MSDS) for this or any Renew Advanced Materials product should be read prior to use and is available upon request from Renew Advanced Materials. All Renew products are safe to use if directions are read and followed carefully. Be careful. Use only with adequate ventilation. Contact with skin and eyes may cause irritation. Flush eyes with soap and water for 15 minutes and seek medical attention. Remove from skin with waterless hand cleaner followed by soap and water.

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.

Renew[™] Advanced Materials, Inc. – A Smooth-On Company
2000 Saint John St. * Easton, PA 18042 * tel. (800) 762-0744

www.renewmaterials.com