



**SILFREE™ SERIES**  
U.S. Patent Pending

**Silica-Free Alginate Impression Materials**

**All Food Grade Formulas — Healthiest Alginates To Use & Nourishes the Soil, Too**

**DESCRIPTION:** The SILFREE series of alginate impression material is a patent pending, dry hydrocolloid and cellulose powder (both of which are extracted from vegetable material) that when mixed in a ratio of approximately two-parts warm water to one-part SILFREE by volume ratio (2.5—3.0-ounces / 56-85 grams +/- of powder to 16-ounces / 452 grams +/- of water by weight) creates a creamy hypoallergenic mold making material that sets to a firm rubber-like consistency in 3-8-minutes (depending on formula). These mix ratios yield creamy mixes about the consistency of thick yogurt to thin peanut butter. Allowing for a mix time of one minute, this provides an application time of about 2-7-minutes. Demolding can be accomplished; being careful; 2 to 3 minutes after the mix can no longer be worked. For making body casts, since you will need to apply a mother mold of plaster bandages or cheese cloth soaked in plaster to support the SILFREE alginate mold, there will be more than sufficient time for the SILFREE alginate to have set when the support mold is ready to demold.

**WATER QUALITY: CAUTION.** Hard water, that is water containing excessive minerals, will likely create an unacceptable non-standard mix. Symptoms include failure to mix smoothly (oat meal consistency) and/or delayed set or even failure to set. Always test a sample from each batch prior to use. Water quality varies from location and from time of the year and well water is often more apt to be excessively hard. Use bottled or de-ionized water if you find that mixing doesn't quickly create a creamy consistency or if set times vary more than a minute from the five minute standard.

**MODEL PREPARATION:** These alginates can be applied to most surfaces with little preparation since the SILFREE Series will not stick to most surfaces including itself. A small test cure should always be done prior to application to be sure the material releases cleanly. A thin coat of petroleum jelly should be applied to eyebrows and eyelashes and ArtMolds' Water Soluble Release MoldEZ™, should be applied to all other hair. A thicker coat of MoldEZ needs to be applied to hair to prevent the hair from being entangled in the SILFREE alginate when it is demolded. Use only petroleum jelly on eyebrows and eyelids as MoldEZ can cause a little stinging if gets into the eyes.

**FEATURES**

- Makes considerably more molding material per pound than any other brand
- Healthy – silica-free formula—no fluoride, too
- Forensic reproduction of the finest detail
- Non-toxic and safest for life casting
- Delayed shrinkage
- 5-to-1 water to powder mix ratio by weight
- Gradual setting time

**MIXING AND CURING:** For best results **WEIGH OUT** the proper amounts of SILFREE powder and warm water (see below) using a gram scale. Cold water will delay set time, warmer water will increase set time. SILFREE alginates may be applied much thicker than other alginates, yet its formula will allow you to achieve forensic detail in spite of the thickness. Here are some suggested mixing proportions for life casting:

Body Part	Powder		Water	
	Oz.	Kg.	Oz.	Kg.
Face w/o ears	12	3.4	72	20.4
Hands in bucket	16	4.5	102	28.8
Full head	32	9.0	192	54.0
Front torso	16	4.5	96	27.0

Add powder to water and mix for 30-60 seconds using a JiffyMixer® on a variable speed drill. A mechanical mixer is not required for smaller amounts. But its best to use a kitchen whisk for hand mixing to prevent mixing in air. It is a must though for FiberGel mixing.

Product	Set Time	Water Temperature	Standard Mix Ratio	Alternate Mix Ratio
Hollywood Impressions SILFREE	2-3 Minutes	80° F (26.7°C)	32-ounces / 905 grams +/- of water to 16-ounces / 452 grams +/- of SILFREE powder by weight	For a thinner mix for casting in a container use 48-ounces of 1357 grams of water to 16-ounces / 452 grams +/- of SILFREE powder by weight
MoldGel Regular Set SILFREE	4-5 Minutes			
FiberGel (patented)	4-5 Minutes			
MoldGel SloSet SILFREE	7-8 Minutes			

CONTINUED FROM PAGE 1

Thicken with more powder, thin with more water. Apply to surface with a flowing motion pushing air out ahead of material.

Alginate will not bond to itself if the previous coat has not completely gelled. Thus, a large mold requiring more than one batch of SILFREE Alginates should be mixed within in the setting time of the previous batch. If this is not possible then coating the gelled material with **Algislo™** will aid in the bonding of the fresh mix to the gelled mix. As soon as the last coat of SILFREE is firm, apply the mother mold. When the mother mold has set, remove the SILFREE with it and for best dimensional stability, immediately make a positive cast within 2-

4 hours of molding. SILFREE alginates retain moisture due to its unique formulation and as a result will not require immediate casting as most alginates do. Most situations will require only one coat of SILFREE due to its superior strength and coverage characteristics

**RELEASE AGENTS:** Except as stated earlier for hair and eyebrows no release agent is required on the skin. In fact we recommend that a model does not wear a skin cream as this reduces skin friction and can make it more difficult for the SILFREE alginate to remain in place on a vertical surface such as a face and torso. SILFREE is water based and is similar to formulas used to create face masque beauty products so it will hydrate the skin without any addition releases, balms or salves.

The exception to this recommendation is the requirement for a hair release for excess skin hair such as that that can be found on certain males. The perfect solution is to have the model shave the area that you are molding. If that cannot be achieved the use of MoldeZ applied on the hair will reduce the possibility of the hair entangling in the mold material when it gels.

**FIBERGEL INSTRUCTIONS:** **FiberGel** is a patented prosthetic grade impression material which contains a fiber matrix to provide exceptional tear strength for your mold making when set. Use **FiberGel** when creating large molds or mold making where tear resistance is critical. Since **FiberGel** contains a fiber material hand mixing is not sufficient to create the creamy mix you would expect from a premium impression material. Therefore, you should use a mechanical mixer such as an electric drill with a mixing attachment.

**USING THE MOLD:** Plaster or waxes, or clay below 212°F may be poured in SILFREE alginate molds. Castings should be made in the freshest possible mold for best results because as the material continues to dry it will shrink, distort and lose detail. Your mold may be kept usable in plastic bags or sealed in an airtight container up to a few days or frozen. Molds should then be discarded. Applicable for resin casting if ultra fast set resins are used.

SILFREE alginate molds can be used to cast numerous materials with excellent results. All water based casting materials such as gypsums and modified gypsum casting systems such as Forton MG, Master Works®, Duo Matrix® and Aqua Resin®. In addition certain fast casting resins may be used satisfactorily. However, since resin and water (the basis of your alginate mold) are not compatible, care should be taken that your alginate mold surface is not overly wet. Patting dry

SILFREE SERIES Packaging	
Product(s)	Unit
<b>Hollywood Impressions</b>	<b>1 lb</b> <b>10-lb</b> <b>20-lb</b> <b>50-lb</b>
<b>MoldGel Regular Set</b>	
<b>MoldGel SloSet</b>	
<b>FiberGel</b>	

with a paper towel or a few minutes with a hair dryer will suffice. **KastEZ™** Resin will work satisfactorily if this precaution is followed.

Food such as Jell-O® and candy (not exceeding 212°F) as well as waxes, soaps and melted clay can be satisfactorily molded in a SILFREE alginate mold

**SAFETY AND CLEANUP:** SILFREE alginate powder may cause dust when being handled. If dust is present, wear a dust mask and avoid eye contact. Though every ingredient used to formulate SILFREE alginate is USP food grade it is not meant for human consumption. Skin contact should be kept as short as possible. Hair must be slicked down with mold release. Keep your containers of SILFREE alginate tightly closed as atmospheric moisture may cause lumping and deterioration of the product.

Use ArtMolds' **Algislo** 3-in-1 Bonder/Softener/Retarder to aide in removing dried impression material from tools, cloth and mold material that may be left behind in the crevices of your castings.

**DISCLAIMER:** The information in this bulletin and otherwise provided by ArtMolds is considered accurate. However, no warranty is expressed or implied regarding the accuracy of this date, the results to be obtained by the use thereof, or that any such use will not infringe any patent. The user assumes all risk and liability whatsoever in connection therewith.



INDEPENDENTLY LAB  
TESTED & APPROVED