55 Hilton Street, Easton PA 18042
(269) 488-4000
www.alumilite.com

TECHNICAL DATA SHEET

Amazing Mold Maker

Amazing Mold Maker is a high-performance, platinum-based silicone mold-making material designed for fast and precise results. With a low viscosity and a 1:1 mix ratio by volume, it easily captures intricate details, making it ideal for high-detail, fast-curing molds. Featuring a work time of 6–8 minutes, Amazing Mold Maker cures to an opaque red color and demolds in approximately 25 to 30 minutes, depending on the mold temperature and material mass. This product is perfect for applications requiring quick turnaround times without compromising on detail.

- Complies with FDA 21 CFR 177.2600
- Great for one-piece molds with undercuts
- Works for complex multi-piece molds
- Can be used for making delicate castings such as chocolate, fondant, and sugar

PRODUCT SPECIFICATIONS	
Mix Ratio	1:1 by volume
Mixed Viscosity	4000 cps
Working Time	6.0-8.0 minutes
Demold Time	30.0 minutes
Hardness	20-A
Full Cure Time	24 hours
Tensile Strength	467psi
Tear Resistance	148.2 pli
Elongation Strength	626%
Shelf Life	1 year
Color	Opaque Red

BEFORE USE: Thoroughly read Safety Data Sheets, product labels and the “SAFETY” section in this Technical Data Sheet.

55 Hilton Street, Easton PA 18042
(269) 488-4000
www.alumilite.com

IMPORTANT: PLEASE NOTE

- Ensure that your frame or mold is watertight. Frames should be constructed from materials that can easily dissipate heat.
- Mold release is required when pouring against another silicone (e.g., when making two-piece molds) to prevent bonding. Use Alumilite's UMR in combination with Rubber Mold Release or a thin layer of Vaseline.
- Avoid contact with porous materials (e.g., fabric, clothing, carpet) as silicone will bond to these materials.
- Securely fasten your master to the mold base to prevent it from floating.
- Vacuum or pressure assistance is recommended for bubble-free, dense parts but is not required for simple parts.
- Your master must have a high gloss surface to produce a clear, glossy casting. If your master has a matte finish, the clear casting will have the same finish.
- Mold Preparation: To enhance the physical properties and curing of your cast resin piece, preheat the mold in a conventional oven at 120-150°F for 15 minutes, or microwave for 1 minute per pound of rubber on high. This helps the resin set uniformly for a consistent, fully cured cast.

BEFORE YOU BEGIN

Work Environment: The ideal working temperature is around 65-75°F in a clean, dry, dust-free environment. Avoid working in high humidity. If you are pouring in large volumes of 2 or more gallons, we suggest keeping room temperature closer to 65°F. We highly recommend keeping fans on your project to help dissipate heat.

Coverage: There are approximately 21 cubic inches of volume per 1lb of Amazing Mold Maker. Therefore, to calculate your needed material, find the area of your mold box minus the area of your master in cubic inches.

Materials: Be prepared with all necessary materials and tools before beginning your project.

- Stir-sticks
- Molds for artistic creation
- Misc. handling tools – scissors, pliers, a drill or Dremel tool, heat gun, blow torch, etc.

MIXING & POURING

When measuring for use, stick with the recommended ratios and blend just what you think you'll need. Once mixed, leftover mixed material can't be saved. Depending upon the ambient conditions (temperature & humidity) – you'll have about 6 minutes. The more humid and warmer the environment

is, the faster your silicone will cure. Temperature alone will not accelerate the cure of Amazing Mold Maker or any other platinum-based silicone. Moisture/humidity is also required.

Step 1: The mix ratio of Amazing Mold Maker is 1:1 by volume. A graduated measuring cup with an accuracy to the nearest oz is recommended. Measure side A and side B in separate containers, then combine and mix thoroughly.

Step 2: After the materials have been poured together, mix thoroughly (keeping the stir stick in contact with the bottom of the cup - reduces air from being introduced) for approximately 2 minutes. Make sure to scrape the sides and the bottom of the mixing cup and continue to mix until no swirls are seen.

Step 3: Once the material is thoroughly mixed, pour the mixture slowly into one corner of your mold box and allow it to flow slowly and naturally around your master. This process allows the mixture to roll over your master, pushing away air that may be trapped underneath. Avoid pouring the mixture directly over or onto your master. Do NOT scrape out the last of the mixture onto your project as it could contaminate your project, leading to curing issues.

Step 4: If your mold has undercuts, pour enough material into the mold to fill it halfway. Tilt and rotate the mold in the opposite direction of the undercut to allow for air to escape. Squeezing or burping the mold at the same time will also help relieve the air trapped in the undercut and allow the bubbles to release from the mold surface.

Step 5: If you plan to degas/vacuum the rubber, be sure to use a container that is approximately 203 times the liquid amount of Amazing Mold Maker you will mix. This will allow it to expand in the container without overflowing into your vacuum chamber. Allow it to rise and collapse under full vacuum to ensure you've removed all air introduced during the mixing process.

CLEAN UP & DISPOSAL

Mold life expectancy is a variable of many different factors including but not limited to the type of resin being used in the mold, the length of time the resin is in the mold, the exotherm of the resin, cycle times, the design of the part, the intricacies of the detail, the force needed to demold, etc. Even with all of these factors, there are some things you can do to get the most life out of your molds. In no order, here are some popular ways to extend the life of your molds:

- Use a mold release such as Stoner or UMR.
- Avoid leaving castings in the molds any longer than needed.
- Allow molds time to cool from peak resin exotherms before pouring the next part.
- Use Silicone Oil to condition molds whenever you stop production for a day or two as well as condition molds with Silicone Oil before storing for periods of time.
- integrate a bake-out process of 400-degrees for 2-hours and allow to cool back down before running more parts every 25% of the expected mold life (this process will draw silicone oil back

to the surface of your mold rejuvenating what has been lost or depleted from the casting process).

Tools can be cleaned with Isopropyl Alcohol 99% or a residue-free cleaner. Do not use soap and water. Dispose of product and container according to Federal, State and local regulations. Store any remaining product in the original bottles, tightly sealed and locked up in a cool, dry environment.

SAFETY

Safety: Before use, thoroughly read Safety Data Sheets and product labels. Follow safety precautions and directions.

- Wear gloves
- Safety glasses
- Protect clothing with a work smock or other outer garment
- For cleaning surfaces, containers – use Acetone, rubbing alcohol or nail polish remover
- When stored separately, epoxy & hardener have long shelf lives – store in a cool dry area in tightly sealed containers

Part A: Keep out of reach of children. Wear impervious gloves, such as butyl rubber or nitrile rubber. Wash skin thoroughly with soap and water after handling. Take off contaminated clothing and wash it before reuse. If skin irritation occurs, get medical help. Wear eye protection, such as chemical safety glasses/googles. If in eyes, rinse cautiously with water for several minutes, removing contact lenses if present and easy to do. If eye irritation persists, get medical help.

Part B: Keep out of reach of children. Do not eat, drink, or smoke when using this product. If swallowed, rinse mouth and get medical help. Use with adequate general or local exhaust ventilation to minimize exposure levels. If needed, a NIOSH-approved respirator with organic vapor cartridge may be used. Wear impervious gloves, such as butyl rubber or nitrile rubber. Wash skin thoroughly with soap and water after handling. Wear eye protection, such as chemical safety glasses/googles. If in eyes, immediately rinse with water for several minutes, removing contact lenses if present and easy to do. If eye irritation persists, get medical help.

WARNING: THE CURE REACTION IS EXOTHERMIC. Do not apply in thicknesses greater than the recommended maximum application thickness for the product.

DISCLAIMER: The information contained herein is considered accurate; however, Alumilite makes no warranty regarding its accuracy. The user must determine the suitability of the product for the intended use and accepts all risk and liability associated with that use.