castaldo®

The Choice of Experience

LiquaCast®

Safely molds just about anything without shrinkage!

IMPROVED FORMULA

EASY MIX RATIO 1:1

Technical Datasheet

Name	LiquiCast®
Shore A Hardness	40
Mix Ratio by Weight	1:1
Rubber Shrinkage	0.0%
Viscosity	Very Low 4,000 cps
Cure Time	12 hours
Rapid Cure Time @150°F / 65°C	90 mins
Specific Gravity	1.39
Elongation Before Break	1100%
Tensile Strength Before Break	4.3 N/mm2
Tear Strength Die C Before Break	16.54 N/mm2
Colour	Pink

*Shrinkage rates given are for the rubber mold itself. Final casting shrinkage rates depend on moldmakers and caster's skill, knowledge, precision and attention to detail.

** Specific gravity. Water = 1.00. Low specific gravity = more molds per pound/kg.

1kg (2.2lbs) Kit **4kg (8.8lbs) Kit**
8kg (17.6lbs) Kit **20kg (44lbs) Kit**

Castaldo® LiquaCast® is a 0% shrinkage room temperature vulcanizing liquid rubber that lets you make molds of delicate objects that would not survive the heat and pressure of the normal vulcanization process.

Typical uses include making molds of CAD-CAM, RP and SLA resin models, wax carvings and wax injections. Also possible are objects from nature — leaves, plants, flowers, fruit, insects – anything!

Easy to pour!

Castaldo® LiquaCast® is an easy-flowing two-part liquid room temperature vulcanizing compound that makes tough, strong, flexible rubber molds in 12 hours at normal temperatures. It can be cured in as little as 90 minutes at temperatures up to 66°C./ 150°F. Unlike traditional silicone liquid molding rubbers, LiquaCast is easy to pour, easy to mix and easy to vacuum de-bubble because of its low viscosity.

Costs Less!

LiquaCast produces superior molds but costs only a fraction of the price you may be accustomed to paying for traditional RTV compounds.

Stronger, tougher molds!

Molds made of LiquaCast are much stronger, tougher and longer lasting than those made from traditional liquid rubber compounds. LiquaCast molds are production molds that can be used 100's of times, not intermediary or prototype molds that can be used only once or twice.

One step mold-making!

LiquaCast avoids the need to cast a delicate wax or resin model in silverand then make a traditional rubber mold from the casting, a process that can take several days and result in multiple levels of shrinkage and an inevitable loss of detail.

Easy to use!

LiquaCast is easy to use and requires no specialized equipment, making it ideal for those without a vulcanizer. It can even be used without a vacuum – merely coat the model with a brush dipped in LiquaCast and inspect it for bubbles before completing the pour. Any bubbles found can easily be pricked with a pin or similar tool. Models can also be dipped in LiquaCast and then inspected for bubbles.

Molds made of Castaldo LiquaCast liquid molding rubber will last many years if stored properly. For best results store finished molds in airtight containers such as the kind sold for food storage.

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Castaldo® LiquaCast® liquid molding rubber is NOT a silicone rubber. Procedures may be different than those you may be accustomed to using. Please read and observe the following instructions carefully.

1. STIR BEFORE USE! Mix 1 part A and 1 parts B by WEIGHT. Components MUST BE WEIGHED CAREFULLY. Use an accurate scale. DO NOT MEASURE BY VOLUME. DO NOT ESTIMATE. DO NOT GUESS! Make sure both parts are at room temperature.

2. Pour the required amounts of both parts A & B into a mixing container. A rubber mixing bowl of the type commonly used to mix jewelry investment is ideal.

3. Always pour catalyst (part A) into rubber (part B).

4. Mix thoroughly by hand for 3 to 4 minutes until no traces of the catalyst can be seen. Take care to scrape the sides of the mixing bowl into the centre several times during mixing.

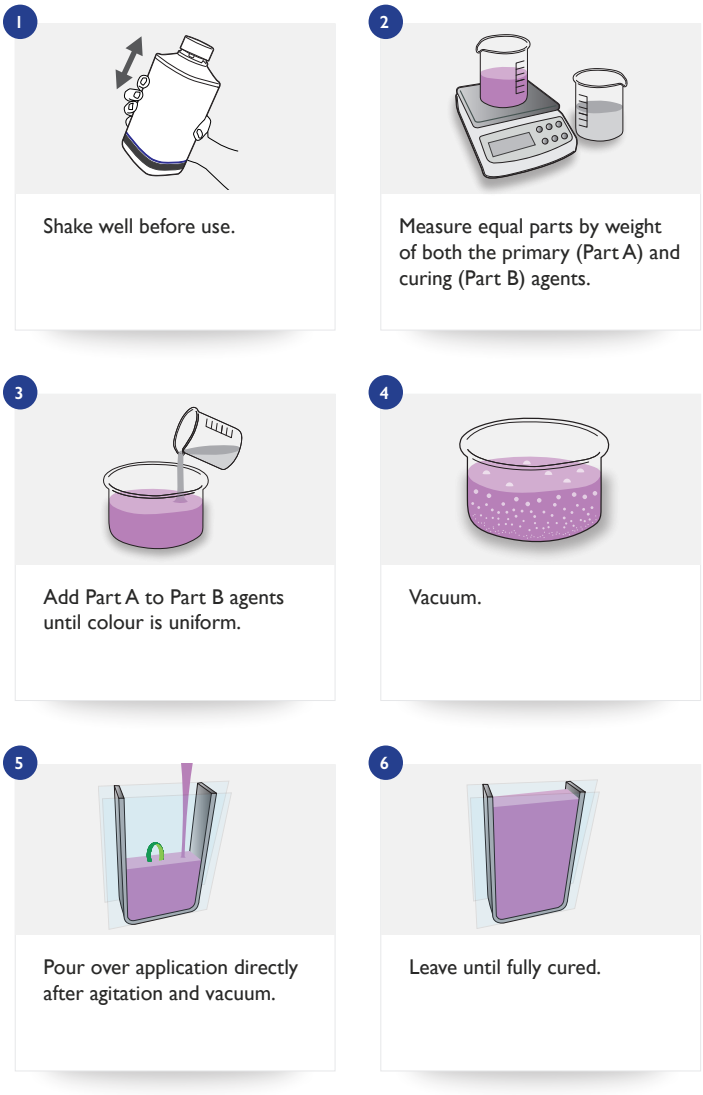
5. Make sure the bowl is big enough to allow for temporary expansion of the rubber during vacuuming of 300% to 400% without overflowing.

6. Vacuum the liquid rubber for approximately 5 minutes, making sure that it boils and bubbles vigorously. Vacuuming is complete once the rubber rises and collapses. Do not wait for the rubber to stop bubbling completely.

7. Pour the liquid rubber into the mold frame, taking care to avoid entrapping air. Vacuum again for 3 minutes. Do not over-vacuum.

8. Working time before cure begins is approximately 45 to 60 minutes at room temperature.

9. Put the mold aside to cure at room temperature (77°F / 25°C) for 16 to 18 hours. A period of 24 hours is best. Always remember that longer cure times will improve the mold and will not hurt it, while shorter mold times will result in soft and deformed molds.



The following is only a guide, the mass of your model will increase or decrease the amount of rubber needed.

Mold Size	Part A	Part B	Total
0.75"/ 19 mm	60.0 g	60.0 g	120.0 g
1.00"/ 25 mm	77.0 g	77.0 g	154.0 g
1.25"/ 32 mm	105.0 g	105.0 g	210.0 g
1.50"/ 38mm	113.0 g	113.0 g	226.0 g

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