castaldo®

The Choice of Experience

LiquaFast ICE

No Heat - No Pressure - No Shrinkage - No Waiting!

Technical Datasheet

Name	LiquaFast ICE
Shore A Hardness	**40 +/- 2**
Mix Ratio by Weight	**1:1**
Rubber Shrinkage	**0.0%**
Viscosity	**Low 8,500cps**
Vulcanises at	**70°F / 21°C**
Cure Time	**60-90 mins**
Rapid Cure Time @150F / 65C	**30 mins**
Specific Gravity	**1.12**
Elongation Before Break	**370%**
Tensile Strength Before Break	**3.5 n/mm²**
Tear Strength Die C Before Break	**18.9 n/mm²**
Colour	**Clear Blue**

*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.

New LiquaFast ICE from CASTALDO® is a transparent two-part 0% shrinkage RTV silicone molding rubber that cures very rapidly at normal room temperatures and cures even faster at slightly warmer temperatures.

That means that you can make a mold from your CAD CAM, RP and SLA models in the morning, shoot waxes 30 minutes later and cast them that afternoon. No more waiting.

New LiquaFast ICE makes strong, tough, tear-resistant permanent molds that last and last and do not become soft with age.

LiquaFast ICE works well with all RP types, including hard-to-mold Solidscape® designs. LiquaFast ICE's low viscosity makes it easy to measure, mix and pour.

Normal cure time is only 60 – 90 minutes. Faster cure is possible at only 50°C. / 120°F.

LiquaFast ICE is economical, costing far less than traditional silicone RTV materials.

- Rapid Molds from Rapid Prototypes.
- Finished Molds in as Little as 30 Minutes.
- Ideal for all 3D, CAD-CAM, Wax and Resin Models.

Castaldo (A Division of Goodwin Refractory Services)
Spencroft Road, Newcastle-under-Lyme, Staffordshire, ST5 9JE

www.castaldo.com
info@castaldo.com

Castaldo® LiquaFast ICE 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 Part 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.

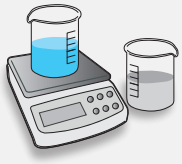
8. Working time before cure begins is approximately 45 to 60 minutes at room temperature.

9. Put the mold aside to cure at room temperature (77°F / 25°C) for 7 to 8 hours. 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.

1

Shake well before use.

2



Measure equal parts by weight of both the primary (Part A) and curing (Part B) agents.

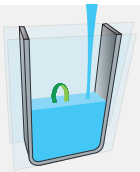
3

Add Part A to Part B agents until colour is uniform.

4

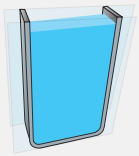
Vacuum.

5



Pour over application directly after agitation and vacuum.

6



Leave until fully cured.

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

Castaldo (A Division of Goodwin Refractory Services)
Spencroft Road, Newcastle-under-Lyme, Staffordshire, ST5 9JE

www.castaldo.com
info@castaldo.com