



**PREMIUM  
INVESTMENT  
POWDER FOR  
CASTING 3D  
PRINTED WAX  
AND RESIN  
PATTERNS**

# METACAST

EVOLVING TECHNOLOGY  
IN DIRECT CASTING

**GOLDSTAR POWDERS IS UNRIVALLED IN DEVELOPING AND IMPROVING OUR INVESTMENT POWDERS TO MEET THE DEMANDS OF THE DEVELOPING WORLD OF DIRECT CASTING 3D PRINTED RESIN OR WAX PATTERNS.**

3D printing is fast moving in terms of technology, resin types and the print demands, Goldstar Powders are committed to continually developing our investment powders to maintain the industry's needs.

Metacast has been extensively tried & tested in some of the most renown factories throughout the world, to offer continued improvement on direct casting of 3D printed resin or wax models, from all types of resin and 3D printing manufacturers for castings far more superior than just optimal results.

**Evolving** – what makes Metacast significantly better than other manufacturers of investment powder is the ability to fast fire a single flask, within 6 hours from mixing the investment powder to obtaining a clean smooth surface casting. This has also vastly improved an already outstanding clean off after casting.

- Fast Fire burnout cycle
- High temperature burnout resistance
- Consistently smooth surfaces
- Easy Clean Off
- Delicate details, replicated time and time again.



[www.goldstarpowders.com](http://www.goldstarpowders.com)

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Do not burnout until a minimum of 90 minutes after investing. During this 90 minute period flasks should not be touched, this includes stripping bases and removing vacuum tape. Do not load flasks into a hot furnace. Always follow the recommended burnout cycle and never place flasks closer than 15mm to elements. Always ensure you do not over or under load your furnace, as this will affect the burnout cycle.

Do not remove flasks from furnace to cast until they have been held at casting temperature for a minimum of 1 hour.

If held for less than 1 hour, the core of the flasks will be at a much higher temperature than the digital temperature display states, and may result in metal mould reaction.

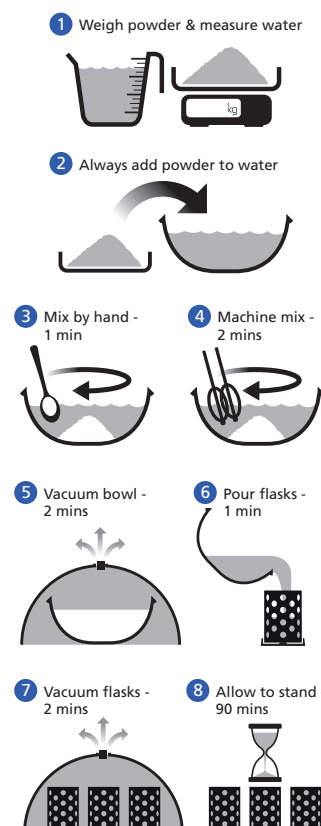
## CAUTION

Always use Resin/CAD manufacturers post build procedure to ensure optimum results using Metacast. Consult Resin/CAD manufacturer for post build procedure.

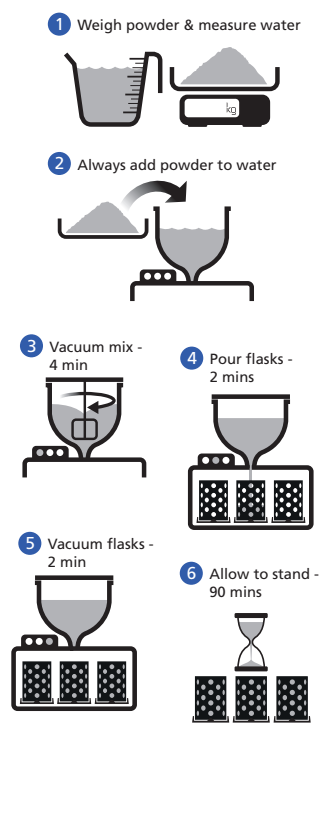
Water/Powder Ratio 40:100	
Conventional Mixing	Time (Mins)
Add Powder To Water	-
Hand Mix	1
Machine Mix	2
Vacuum Bowl	2
Pour Flasks	1
Vacuum Flasks	2
<b>Total Mixing Time</b>	<b>8</b>

Water/Powder Ratio 38-40:100	
Vacuum Mixing	Time (Mins)
Add Powder To Water	-
Mix Under Vacuum	4
Pour Flasks	2
Hold Under Vacuum	2
<b>Total Mixing Time</b>	<b>8</b>

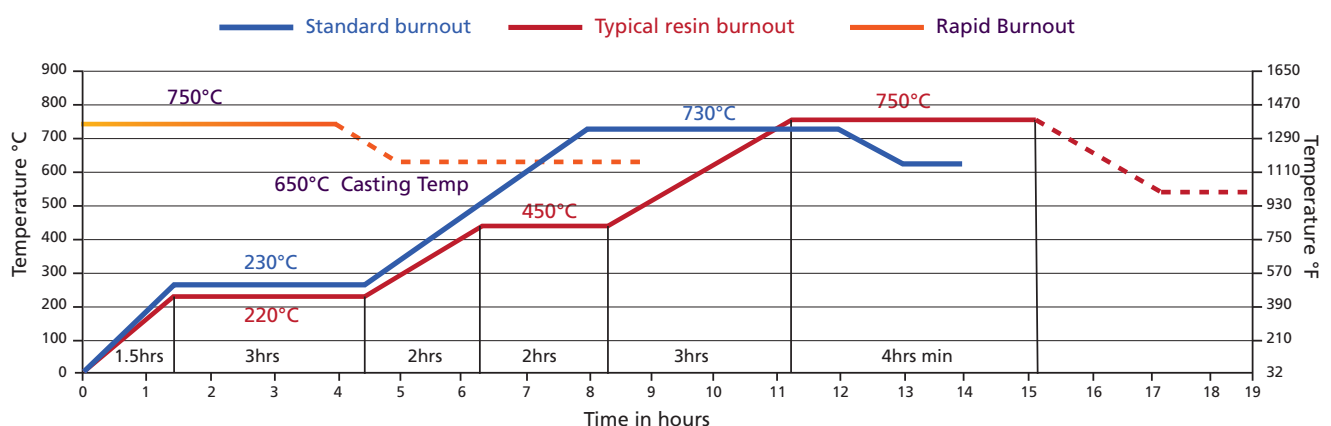
## Conventional Mixing



## Vacuum Mixing



## BURNOUT PROCEDURE



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