



# A WHOLE NEW EXCITING WORLD OF CASTING!

## Introduction

ARC (Acrylic Resin Composite) is a two-component system, a water-based acrylic liquid, and a mineral powder base. ARC is proudly formulated and made in Australia by Just Resin. This system is suitable for a wide range of casting and moulding applications including decorative cast objects, rigid moulds and many other moulding projects. ARC is suitable for internal and external use, for external use we recommend a sealer or suitable coating system to protect the surface.

## Preparation

Before starting any project, please ensure of a clear and safe working environment, solvent-based chemicals are not to be used within work area. All mixing containers & tools should be clean and dry before use. Please review the TDS or SDS if needed. Work area should be out of direct sunlight, ideal temperature between 20 - 25c with less than 80% humidity.

ARC is measured by weight; it is essential to use accurate scales and suitable mixing tools to ensure that the compound performs within its specification. Failure to follow this user guide can lead to lumpy mixtures, change to curing time, strength loss and reduced durability.

## Mix Ratio

Recommended mixing ratio is 2.5 parts Powder base to 1 part Liquid.  
Other mixing ratios from 2.5:1 to 3:1 can be used if faster curing or a thicker medium is required, please refer to product description. Adjustments can be made to the ratio to accommodate for sand, stone, metal and other fillers.

## Mixing

When mixing ARC, please ensure mixing container is a suitable size for the total volume of base powder, liquid and fillers. For best results, weigh the powder base in the final mixing container and weigh the liquid individually.

With a gloved hand, inspect the mineral powder base to ensure its lump free.

For a solid colour casting, pigment can be added to the liquid or once mixing has been completed. Ensure pigment is mixed until liquid is uniform and to the desired colour, a maximum pigment loading of 2% total weight is recommended. Please note if pigment load exceeds the recommended loading, this may prevent ARC from curing correctly and result in weak/breakable casts.

Incorporate approximately 80% of the liquid to the powder base, mix until smooth and lump free, it will form a thick paste. Add the remaining 20% of the liquid to the powder base, mix until you have achieved uniformity throughout.

Please note pot life starts once liquid is added to powder base, worktime is 20mins +/- 2mins at 25c.

## Casting

For simple castings pour a small amount of the mixture into the mould and coat the mould surface evenly. To avoid air bubbles getting trapped on the mould surface, use a small clean brush or mixing stick to ensure all edges & corners have an even coating. A gentle tap whilst filling mould will encourage air bubbles to rise to the surface, a gentle blowtorch across the surface can also help release trapped air bubbles. Please note when applying heat to ensure constant movement, we recommend avoiding direct contact to moulds as heat may cause damage.

Leave the casting to set approximately 30 - 40mins, this can vary depending on weather condition, size of casting and amount of pigment used. Demoulding can be performed once mixture has completely set, please note ARC requires 8 - 10 hours to gain 80% of its strength. ARC will continue to harden while all the moisture evaporates from the casting, this can take up to 6 - 8 days depending on weather conditions



## Lets get creating

### Step 1

Weigh out ARC powder & liquid, at a mixing ratio of 2.5 parts powder to 1 part liquid. Refer to our calculator online if needed.



### Step 2

Pour approx 80% of the liquid into the powder, mix slowly until a thick paste forms, ensuring its smooth & free of lumps. Scrape sides & base of container.



### Step 3

Pour the remainder of the liquid, and mix until a uniform mixture is achieved.

### Step 4

Divide into smaller cups, and add ARC pigments to the mixture. Start with a couple of drops and increase as desired, without exceeding a 2% of total weight.



### Step 5

Pour the mixture into the mould in your chosen design.



### Step 6

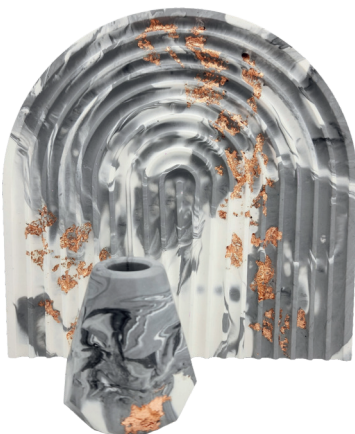
Gently tap the sides of the mould, whilst the mixture is still liquid. This will aid in releasing unwanted bubbles.

### Step 7

Leave your project to set for 40 minutes, in a cool dry area.

### Step 8

Time to demould your ARC project! Once you have taken it out of the mould, it will require 8-10hrs to gain 80% of its strength. ARC will continue to harden while all the moisture evaporates out of the casting.



### Questions?

Our team are always here for a helping hand! If you have any questions at all, reach out to us via email on [hello@justresin.com.au](mailto:hello@justresin.com.au)

### Helpful links

[www.justresin.com.au/faq](http://www.justresin.com.au/faq)  
[www.justresin.com.au/resincalculator](http://www.justresin.com.au/resincalculator)

[www.justresin.com.au](http://www.justresin.com.au)

