

# JESMONITE<sup>®</sup>

MADE FROM



## Jesmonite AC100 User Guide



## Introduction

Jesmonite® AC100 is supplied as two components, a water-based acrylic liquid, and a mineral base. The system is suitable for a wide range of casting and laminating applications including decorative cast objects, rubber mould support cases, polystyrene and foam coating, rigid moulds and many other areas in the world of moulding. A range of ancillary products is also supplied further extending the materials versatility. Jesmonite AC100 is suitable for internal and external use, however if used externally a sealer or suitable paint system is recommended to protect surface appearance.

Project specific advice can be obtained by calling our technical department on +44 (0)1588 630302.

## Preparation

It is essential to use both accurate scales and a Jesmonite High-shear Mixing Blade to ensure that the compound performs within its specification. Failure to follow these instructions can lead to strength loss, slow cure, and reduced durability.

Workshop conditions should be warm, dry, and out of direct sunlight. Environments where solvent-based compounds are in regular use should be avoided. Mixing containers should be clean and dry, and of a suitable size.

## Mix Ratios

The standard mix ratio for AC100 is as follows:



Adjustments can be made to the ratio for addition of additives such as stone and metal fillers, sands, lightweight fillers etc. Please refer to the specific sections of the instructions below. It is also possible to mix the material at a 3:1 ratio to produce a fast set which can be used to fill joints, air bubbles, or to join castings.



How Much Will I Need?

Square Mould = 200g of mixed AC100

56g Liquid  
144g Jesmonite Base

Hexagon Mould = 126g of mixed AC100

36g Liquid  
90g Jesmonite base

MIXING

If you want to cast a solid colour, mix the pigment into the pre-weighed AC100 liquids, blend thoroughly and slowly add the Jesmonite base to the liquids whilst mixing until the mix is smooth, flowing and free from lumps. Alternatively, you can add the pigment to the mixed Jesmonite, experiment by swirling it through to create different effects. You will not need much pigment; the standard addition rate is 2% by weight of total mixed Jesmonite (or 20g/kg) so for these sized casts you will only need a few grams. If you add too much pigment, it will stop the Jesmonite from setting or make the cast object weak and breakable.

Casting

For simple casts like the enclosed, pour a small amount of the mix into the mould and coat the surface evenly. To avoid any air bubbles on the surface, use a small clean, dry brush to coat the surface evenly and get into the edges of your mould. You can tap the mould too to get rid of surface air bubbles. Then fill up the mould with the remaining mixed Jesmonite, gentle tapping of the mould will help any air bubbles rise to the top surface. Then leave your cast for about 30-40 mins to set. Once you have taken it out of the mould, it will gain its full strength after 24 hours. Jesmonite needs all the moisture to evaporate to gain its strength, if you leave it in the mould it will sweat, may mark, and not dry thoroughly.



## Surface Finish

Jesmonite AC100 contains a high quality pure acrylic resin that can be polished with a clean cotton cloth. Excellent results can be achieved with a wide range of waxes and polishing machinery, and Jesmonite AC100 is also compatible with a wide range of water-based sealers and varnishes.

## Storage

As a basic rule liquid containers should be kept well sealed to prevent water evaporation and skin forming, freezing must be avoided. They should be stored at a constant temperature between 5 – 25°C and Base should be kept dry and stored at 5 – 25°C.

## Cleaning Up

Because Jesmonite is water based, its easy to clean up when you have finished. Scrape any excess unused Jesmonite into the bin then wash your hands, mixing pots, brushes, and the mould in warm soapy water. It's that easy! You can use White Spirit to remove any pigment residue from your mould if necessary.



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The above information and recommendations are based upon our experience and are offered merely for advice. they are offered in good faith but without guarantee, as conditions and methods of use are beyond our control. it remains the responsibility of the end user to determine the suitability of the materials for the particular purpose intended.

## Contact Details

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## The key benefits of using Jesmonite



### Stronger

Strong, flexible and more durable, making it high impact resistant.



### Lighter

Lighter than stone, glass-reinforced concrete, sand and cement products – perfect for film sets.



### Safer

Independently fire rated in accordance with European Fire Classification EN 13501-1. Solvent free with no VOC's



### Finer

Replicates the very finest detail with superior weathering qualities.



### Greener

Water-based making it kinder to the environment.



### More choice

Can be pigmented to any colour or RAL reference. It can also mimic any texture and reproduce the effect of materials such as stone, metal, wood, leather and fabric.