

# AC300

## PRODUCT DESCRIPTION

Jesmonite® AC300 is a water-based, two-component, acrylic polymer/mineral resin system. The system is suitable for a wide range of casting and laminating applications where the end user wants to reduce the many risks associated with conventional solvent based systems. A range of ancillary products including decorative and functional fillers, control chemicals, pigments, and glass reinforcements are also provided making the material extremely versatile. The material is designed for internal use only. The material is an economic alternative to Jesmonite AC100 where external durability is not essential.

## SPECIFICATIONS

Mix ratio	2.5:1 parts Base to Liquids ratio by weight
Wet density	1845 kg/m <sup>3</sup>
Dry density	1745 kg/m <sup>3</sup>
Initial set	15 – 20 minutes (18°C, No Retarder)
Expansion on set	0.15%

## OTHER PROPERTIES

Compressive strength	30 – 35 Mpa
Tensile strength (UTS)	20 – 25 Mpa
Bending elastic limit (LOP)	15 – 20 Mpa
Bending strength (MOR)	50 – 65 Mpa
Youngs modulus	5 – 6 Mpa
Impact strength (Charpy)	30 KJ/m <sup>2</sup>
Moisture movement	<1%
Fire resistance	B.S.476 Part 6&7 – Class 'O'
Freeze/Thaw resistance	Excellent – Test specimens undamaged

## APPLICATION AREAS

Jesmonite AC300 is suitable for both cast and laminated decorative mouldings, and with the inclusion of suitable glass reinforcements can be utilised for lightweight, high-impact panels. It also provides a Class 1 fire resistant surface coating for expanded foams for theme parks, theatre props, sculpture etc. The material provides users with a water-based alternative to standard Glass Reinforced Polyester for rigid moulds and tooling.

## KEY ATTRIBUTES

Bulk supplied material to reduce costs and maximise transport efficiency.  
General purpose material with a wide range of applications.

## PACKAGING

AC300 is supplied in kit form in two formats. Small kits of 35kg and 70kg are available in plastic packaging. AC300 is also supplied as Bulk kits of 420kg and 3,500kg. Base in Bulk Kits is supplied in Valve Sacks.

## STORAGE

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

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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 is the responsibility of the end user to determine the suitability of the materials for the particular purpose intended.*

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**THE KEY BENEFITS OF USING JESMONITE**



**Stronger**

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



**Finer**

Replicates the very finest detail.



**Greener**

Water-based not solvent-based making it kinder to the environment.



**Lighter**

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



**Safer**

Fire-resistant with a class zero fire rating, reduced smoke density and toxicity characteristics. Solvent free with no VOC's.



**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.