

# AC100

## PRODUCT DESCRIPTION

Jesmonite® AC100 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 suitable for internal and external use, however if used externally a sealer or suitable paint system is recommended to protect surface appearance.

## 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	25 – 30 MPa
Tensile strength (UTS)	25 – 35 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%
EN13501-1 Fire Classification	B-s1-d0
ASTM E84 Fire Classification	Class A (Class 1)
Freeze/Thaw resistance	Excellent – Test specimens undamaged
Wet/Dry 50 cycles	Test specimens undamaged

## APPLICATION AREAS

Cast and laminated decorative mouldings, and with the inclusion of suitable glass reinforcements AC100 can be used for lightweight, high-impact panels. Jesmonite AC100 provides a fire resistant coating for many expanded foams for theme park and theatre props.

## KEY ATTRIBUTES

Solvent free – No VOC's  
Good abrasion resistance and impact strength  
High compressive and tensile strength  
Rapid curing and high early strength gain

## PACKAGING

Liquids are supplied in 1kg, 5kg, and 25kg canisters, Base in 5kg and 25kg buckets and 25kg Valve Sacks. Bulk IBC/FIBC supply available on request.

## 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 remains the responsibility of the end user to determine the suitability of the materials for the particular purpose intended.

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