TECHNICAL DATA SHEET (TDS100/20)

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/m³ Dry density 1745 kg/m³

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 30 KJ/m² Impact strength (Charpy) Moisture movement <1% EN13501-1 Fire Classification B-s1-d0

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 1,5,10,20kg cannisters and base in 2.5kg bucket, 12.5 kg bucket and 25kg bag.

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 $5 - 25^{\circ}$ C and base should be kept dry and stored at $5 - 25^{\circ}$ C.

