F-AD822-UC
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Technical Data Sheet

FORTIS AD 822 ULTRA CLEAR

FORTIS AD 822 ULTRA CLEAR is solvent free, liquid epoxy resin system specifically designed for applications that require a crystal clear, high gloss casting that will cure at room temperature. AD 822 Ultra Clear is a low viscosity epoxy allowing superior air release for a bubble free finish, and is designed for medium sized castings between 5 and 30mm in a single pour. Multiple pours can be used for river table applications.

FEATURES

- Low viscosity
- Excellent bubble release
- Self levelling
- Low exotherm
- High clarity and low colour

TYPICAL APPLICATION

- Casting

TECHNICAL DATA

Color: Clear liquid

Pot life (100g at 25 ºC): 60 minutes

Thin film set time (at 25 ºC): 24 hours

Cured to solid state: 7 days

Cure to maximum strength: 7 days

Mixed viscosity:

Shore D hardness ((at 20 ºC): 83

Colour Stability: Darkens on exposure

SURFACE PREPARATION

Working area should be covered with cardboard or plastic. The surface to be coated should be dry and free of contaminants.

MIX RATIO

2 parts A resin to 1 part B hardener by volume
(100 parts A resin to 44 parts B hardener by weight)

MIXING

Nitrile gloves should be worn while handling. Ensure Fortis AD 822 Ultra Clear Part A and B are shaken prior to pouring and mixing. Graduated plastic mixing containers are recommended for measuring volumetric quantities. Part B is to be added to Part A and mixed at low speed with a Jiffy style mechanical mixer. Mix only enough material for immediate use. Care should be taken to minimize air introduced during mixing. Mix until a smooth and homogeneous mixture is formed, free of striations. This should take approximately 3 minutes. Ensure material from the bottom and edges of the pail are sufficiently mixed. Let material stand for 1 minute. Mix for an additional minute.

MIXING VOLUME

The cure speed of this product depends greatly upon the volume of product mixed. If mixing large volumes, material should be poured quickly into the desired cast. Material left to stand in bulk areas such as mixing containers will exotherm and react quickly. 1L of mixed material will exotherm excessively after approximately 1 hour and will need to be split into smaller volumes. Material cast into a 400mL block 80mm high and 40mm in diameter will exotherm to greater than 120ºC and discolour.

SHELF LIFE

12mths @ 25ºC unopened

For further information, refer to the Fortis website www.fortisadhesives.com.au It contains not only the Safety Data Sheets but also technical bulletins on coatings applications and surface preparation.

DEPTH

This is a medium speed casting system specifically designed for a low exotherm for small to medium sized pours (5-30mm thick). Thicknesses above this can be achieved in multiple pours. This product can be used for coatings and small crack filling, however full cure will be achieved slowly. For coatings applications, AD 822 Ultra Cure Rapid is recommended.

APPLICATION

Cover working area with cardboard or plastic. The surface to be coated should be dry and free of contaminants. For best results, apply at temperatures between 15 and 30ºC and at below 85% humidity. Air bubbles may form on the surface. Air bubbe release is greatly enhanced by use of a heat gun or gas torch. Care should be taken to avoid over heating in one spot – sweep the heat gun continuously across the surface for a few seconds. The mixed product should be cured in a warm, dust free area, and should be covered with a box.

LIMITATIONS

Avoid working in conditions that could cause condensation to form on the uncured coating, and giving rise to amine surface "bloom" or "blush", and permanent loss of chemical and physical properties, and potential inter-coat adhesion issues. Moisture and temperature are the key considerations – avoid using this product at temperatures lower that 10°C, and take all reasonable measures to minimise the risk of contact with water, moisture, or excessive humidity during the cure period. Do not thin.

CLEAN UP

Equipment can be cleaned with xylene or acetone immediately after use. Hardened materials must be removed mechanically.

SAFETY

Refer to material safety data sheet. Avoid skin contact. Mix and apply with adequate fresh ventilation.

PACK SIZE

To be determined

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