

## SEASHIELD™ 311 UW EPOXY GROUT

**High-Strength, Non-Shrink, Underwater Grout**

### Description

SeaShield™ 311 Underwater Epoxy Grout is a 2-component, non-shrink, high-strength fluid grout designed for use in underwater or wet conditions. It is based on a hydrophobic resin system, which has the unique ability to displace water to ensure good adhesion.

### Uses

A high-strength, pourable, gap filling compound for underwater repairs such as pile restoration work. Machine bedding, crusher backing, fixing bolts and anchors into concrete. Levelling and fixing rail chairs and lugs.

### Features

- 2 component system with a mix weight ratio of 10:1, Resin:Activator
- Non-shrink for maximum durability and adhesion
- Resistant to most dilute acids, alkalis, petroleum products and salt water
- 100% solids
- Designed for underwater and other wet applications
- Grey colour

### Application

All surfaces must be clean, mechanically sound and free of oil, dirt and dust. Concrete and cement screeds to preferable have a wood float finish, with a minimum compressive strength of 25 MPa. Abrasive blast or acid etch to remove laitance.

Thoroughly mix the resin and activator in the proportions given, using a slow speed mechanical mixer. Allow to stand for about 10 minutes to allow aeration to subside. Pot life at 25°C is approximately 40 minutes.

Pour the mixed grout into the cavity ensuring the following precautions;

- Allow the trapped air to escape
- A gap of more than 20 mm must be allowed for horizontal flow at 25°C
- Do not apply below 10°C, as the compound will become less fluid

Epoxy resin grouts generate heat as they begin to gel due to an exothermic reaction, especially when large volumes are poured.



# SeaShield™ 311 UW Epoxy Grout

## TECHNICAL DATA

PROPERTIES	VALUE
Colour	Grey
Curing Time	
Initial Set	8 h
Practical Cure	24 h
Full Cure	7 days
Hardness (Shore D)	>80 Shore D
Compressive Strength (ASTM C109)	82 MPa (2 day), 103 MPa (7 day)
Compressive Strength (AS 1478.2)	60 MPa (1 day), 85 MPa (3 day), 103 MPa (7 day), 108 MPa (28 day)
Tensile Strength (AS 1012.2.10)	21 MPa (21 days), 31 MPa (28 days)
Bond Strength (ASTM C882)	> 15 Concrete fails
Flexural Strength (AS 1012.2.11)	29 MPa (7 days), 36 MPa (28 days)
Adhesion to Concrete	>5 MPa with failure of concrete substrate
Adhesion to Steel	>15 MPa with failure of epoxy (cohesive failure of epoxy, steel adhesion is 100%)
Linear Shrinkage (ASTM C531)	<0.017%
Peak Exotherm (50 mm x 100 mm cylinder)	30°C
Flash Point (ASTM D92)	>100°C
Application Temperature	10°C to 40°C
Service Temperature	-20°C to 80°C
Recommended Substrate Moisture	5%
Recommended Relative Humidity	20% - 90%

SHELF-LIFE: Minimum 24 months

STORAGE: Store between 10°C and 40°C in a cool, dry area and away from heat and direct sunlight.

CLEANING: Clean equipment immediately after use with a water soluble brush cleaner.

HEALTH AND SAFETY: Wear protective clothing and ensure adequate ventilation. Avoid contact with skin and eyes. See safety data sheets for further information.

PACKAGING: 15 kg kit (8 L)



**DENSO (AUSTRALIA) PTY LTD**  
77 - 95 National Boulevard  
Campbellfield, VIC 3061  
Tel: +61 3 9356 7600  
Fax: +61 3 9356 7699

[www.densoaustralia.com.au](http://www.densoaustralia.com.au)

***A Member of the Winn & Coales International***

The information given on this sheet is intended as a general guide only and should not be used for specification purposes. We believe the information to be accurate and reliable but do not guarantee it. We assume no responsibility for the use of this information. Users must, by their own tests, determine the suitability of the products and information supplied by us for their own particular purposes. No patent liability can be assumed.