# PRODUCT SPECIFICATION SHEET BELZONA 4154

BELZONA®
Repair • Protect • Improve

FN10188

## **GENERAL INFORMATION**

## **Product Description:**

A two component clear amber resin system designed to use with various aggregates for repairing and resurfacing concrete and stonework damaged by impact, vibration, chemicals and environmental attack. Designed to be cost effective for large volume repairs. Note that this product is designed to be over coated with other Belzona materials.

For aggregates recommendations, please refer to Belzona Instructions for Use (IFU).

## **Application Areas:**

When mixed and applied as detailed in the Belzona Instructions for Use (IFU), the system is ideally suited for:

Repairing and rebuilding any structure made from concrete, brick, marble, stone, etc.

## **APPLICATION INFORMATION**

#### Working Life

Will vary according to temperature. At  $68^{\circ}\text{F}$  (20°C), use all mixed material within 45 minutes.

## **Coverage Rates**

The coverage rate is typically 10.7 ft2 (1.0 m2) at an average thickness of 0.5 in (12 mm) per 3.25~kg Belzona 4154 mixed with 22.5 kg (50 lb) aggregate. The practical coverage rate will vary according to the characteristics of aggregate.

## **Cure Time**

Will be reduced for thicker sections and extended for thinner applications. Allow to solidify for the times shown in the Belzona IFU before subjecting it to the conditions indicated.

## **Volume Capacity**

The volume capacity is typically 770 in<sup>3</sup> (12700 cm<sup>3</sup>) per 3.25 kg Belzona 4154 mixed with 22.5 kg (50 lb) aggregate. The practical volume capacity will vary according to the characteristics of aggregate.

## **Base Component**

Appearance Hazy Liquid
Color Light amber
Viscosity 8.4 poise at 72°F (22°C)
Density 1.10 g/cm³

## **Solidifier Component**

 Appearance
 Clear Liquid

 Color
 Amber

 Viscosity
 1.2 poise at 72°F (22°C)

 Density
 1.00-1.03 g/cm³

## Mixing Ratio

For mixing small quantities the mixing ratio by weight of the component is:

(Base : Solidifier) 6.7 : 1

(Base : Solidifier : Aggregate) 6.7 : 1 : 53

The above application information serves as introductory guide only. For full application details including the recommended application procedure/technique, refer to the Belzona IFU which is enclosed with each packaged product.

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## **ADHESION**

## **Tensile Shear**

The tensile shear adhesion to steel when tested in accordance with ASTM D1002 after 24 hours at 72°F (22°C) is typically 2,800 psi (19.31 MPa).

## Positest Dolly Pull Off

When tested in accordance with ASTM D4541, adhesion will typically be:

Dry concrete

>500 psi (3.45 MPa)\* 24 hours at 72°F (22°C)

\* Cohesive failure of substrate

# COMPRESSIVE PROPERTIES

## **Compressive Strength**

When tested in accordance with ASTM D695 the compressive

strength is typically

9500 psi (65.50 MPa) 24 hours at 72°F (22°C) 13000 psi (89.63 MPa) 7 days at 72°F (22°C)

## **Compressive Modulus**

When tested in accordance with ASTM D695 the compressive

modulus is typically

2.60 x 10<sup>5</sup> psi (1793 MPa) 24 hours at 72°F (22°C) 2.90 x 10<sup>5</sup> psi (1999 MPa) 7 days at 72°F (22°C)

# **FLEXURAL PROPERTIES**

## Flexural Strength

The flexural strength of the material when tested to ASTM D790 is typically

7500 psi (51.71 MPa) 11800 psi (81.36 MPa) 24 hours at 72°F (22°C) 7 days at 72°F (22°C)

#### **HARDNESS**

## Shore D

The Shore D hardness of the material when tested in accordance with ASTM D2240 after 24 hours at 72°F (22°C) is typically: 81.

# SHELF LIFE

Separate base and solidifier components shall have a shelf life of 5 years from date of manufacture when stored in their original unopened containers between 32°F (0°C) and 86°F (30°C).

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#### WARRANTY

This product will meet the performance claims stated herein when material is stored and used as instructed in the Belzona Information For Use leaflet. Belzona ensures that all its products are carefully manufactured to ensure the highest quality possible and are tested strictly in accordance with universally recognized standards (ASTM, ANSI, BS, DIN, ISO, etc.). Since Belzona has no control over the use of the product described herein, no warranty for any application can be given.

#### AVAII ABII ITY AND COST

**Belzona 4154** is available from a network of Belzona Distributors throughout the world for prompt delivery to the application site. For information, consult the Belzona Distributor in your area.

#### **HEALTH AND SAFETY**

Prior to using this material, please consult the relevant Safety Data Sheets.

## MANUFACTURER / SUPPLIER

Belzona Inc. 14300 NW 60<sup>th</sup> Ave, Miami Lakes, FL, 33014, USA

#### TECHNICAL SERVICE

Complete technical assistance is available and includes fully trained Technical Consultants, technical service personnel and fully staffed research, development and quality control laboratories.

The technical data contained herein is based on the results of long term tests carried out in our laboratories and to the best of our knowledge is true and accurate on the date of publication. It is however subject to change without prior notice and the user should contact Belzona to verify the technical data is correct before specifying or ordering. No guarantee of accuracy is given or implied. We assume no responsibility for rates of coverage, performance or injury resulting from use. Liability, if any, is limited to the replacement of products. No other warranty or guarantee of any kind is made by Belzona, express or implied, whether statutory, by operation of law or otherwise, including merchantability or fitness for a particular purpose.

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