# Belzona 1821



# FN10131 (FLUID METAL)

# **INSTRUCTIONS FOR USE**

# 1. SURFACE PREPARATION

- Brush away loose contamination and degrease with a rag soaked in Belzona<sup>®</sup> 9111 (Cleaner/Degreaser) or any other effective cleaner which does not leave a residue e.g. methyl ethyl ketone (MEK).
- b) Abrade metallic surfaces to remove loose rust and flaking paint and then roughen by blasting, grinding or other suitable means to achieve a rough bright metal surface.
- c) Finally degrease again. Use clean rags to avoid spreading contamination.

#### WHERE BELZONA® 1821 SHOULD NOT ADHERE

Brush on a thin layer of **Belzona<sup>®</sup> 9411** (Release Agent) and allow to dry for 15-20 minutes before proceeding to step 2.

## 2. COMBINING THE REACTIVE COMPONENTS

Transfer the entire contents of the Solidifier can into the Base module. Mix thoroughly together to achieve a uniform material free of any streakiness.

#### NOTES:

#### 1. MIXING SMALL QUANTITIES

For mixing small quantities of **Belzona<sup>®</sup> 1821** use: 2.7 parts Base to 1 part Solidifier by volume 6.7 parts Base to 1 part Solidifier by weight

#### 2. WORKING LIFE

From the commencement of mixing, **Belzona<sup>®</sup> 1821** must be used within the times shown below.

Temperature	41°F (5°C)	59°F (15°C)	77°F (25°C)
Use all material within	60 min.	30 min.	20 min.

#### 3. VOLUME CAPACITY OF MIXED BELZONA® 1821

29.2 cu.in. (478 cm<sup>3</sup>) per kg.

#### 4. MIXING AT LOW TEMPERATURES

To ease mixing when the material temperature is below 41°F (5°C), warm the Base and Solidifier modules until the contents attain a temperature of 68-77°F (20-25°C).

# 5. MASKING THE SURFACE TO PROVIDE A NON-SKID PATTERN

After preparing the surface, lay out masking tape to give the outline of the required grip pattern. This can be varied to suit the type and location of the substrate and may be in the form of stripes, squares or chevrons.

# 3. APPLYING BELZONA<sup>®</sup> 1821

#### FOR BEST RESULTS Do not apply when:

- i) The temperature is below 41°F (5°C) or the relative humidity is above 90%.
- ii) Rain, snow, fog or mist is present.
- iii) There is moisture on the metal surface or is likely to be deposited by subsequent condensation.
- iv) The working environment is likely to be contaminated by oil/grease from adjacent equipment or smoke from kerosene heaters or tobacco smoking.

Apply the **Belzona<sup>®</sup> 1821** directly on to the prepared surface with a stiff bristled brush or with the plastic applicator provided. To achieve the correct film thickness of 15 - 20 mils (375 - 500 microns), a practical coverage rate of 9.25 sq.ft. (0.86 sq.m.) per 1kg unit should be obtained.

#### CLEANING

Mixing tools should be cleaned immediately after use with **Belzona<sup>®</sup> 9111** or any other effective solvent e.g. Methyl ethyl ketone (MEK). Brushes, injection guns and any other application tools should be cleaned using a suitable solvent such as **Belzona<sup>®</sup> 9121,** MEK, acetone or cellulose thinners.

# 4. APPLICATION OF A FURTHER LAYER OF BELZONA<sup>®</sup> 1821

Where this is required it should be applied as soon as the first layer becomes tack free or a maximum of 12 hours after application of the first layer when the ambient temperature is 59-68°F (15-20°C). At higher temperatures this time will be reduced, at lower temperatures it will be increased. After a maximum overcoating time has elapsed the solidified **Belzona® 1821** must be roughened before applying **Belzona® 1821**.

# 5. COMPLETION OF THE MOLECULAR REACTION

Allow **Belzona<sup>®</sup> 1821** to solidify as below subjecting it to the conditions indicated.

Temperature	Movement or use involving no loading or immersion in chemicals	Machining and/or light loading	Full mechanical or thermal loading	Immersion in chemicals
41°F/ 5°C	16 hours	16 hours	1½ days	14 days
59°F/15°C	6 hours	6 hours	1 ½ days	10 days
77°F/25°C	3 hours	3 hours	1 day	5 days

# 6. NON-SLIP APPLICATIONS ON BRAKE TEST ROLLERS

- a) For non-slip applications to brake test rollers, mask off the ends of the rollers which are not to be treated, this lends a neat appearance to the application.
- b) Apply the mixed **Belzona<sup>®</sup> 1821** as described previously. To obtain a smooth finish the rollers should be rotated slowly.
- c) Sprinkle Belzona<sup>®</sup> 9211 (Supergrip Aggregate) into the uncured Belzona<sup>®</sup> 1821 to the required density.
- d) Press the Belzona<sup>®</sup> 9211 into the Belzona<sup>®</sup> 1821 using a wooden block.
- e) Lightly sweep over the system with a brush to remove excess **Belzona<sup>®</sup> 9211** which can be used again.
- f) Remove the masking tape immediately this will give a neat feather-edge to the application.

### HEALTH & SAFETY INFORMATION

Please read and make sure you understand the relevant Safety Data Sheets.

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.

Belzona products are manufactured under an ISO 9001 Registered Quality Management System

Nothing in the foregoing statement shall exclude or limit any liability of Belzona to the extent such liability cannot by law be excluded or limited.

Copyright © 2015 Belzona International Limited. Belzona® is a registered trademark.



Publication No. 27-04-14-01

Belzona 1821 - Instructions for Use - (2)

www.belzona.com