

Belzona 1161

FN 10185 (SUPER UW-METAL)



INSTRUCTIONS FOR USE

1. TO ENSURE AN EFFECTIVE MOLECULAR WELD

Belzona® 1161 is tolerant of surface preparation and can be applied directly to wet and oily surfaces, however it is recommended that the best possible surface preparation is carried out. As a minimum, the substrate must always be firm and free from loose corroded material, mill scale, dust, and any other loose debris."

RECOMMENDED PROCEDURE

- i) Blast clean the metal surface to achieve the following minimum standard of cleanliness:
ISO 8501-1 Sa 2 thorough blast cleaning
SSPC SP-6 commercial blast cleaning
Swedish Standard Sa 2 SIS 05 5900.
- or
- ii) UHP Hydroblasting (2000 - 2500 bar) to remove previous coatings and expose original profile.
- or
- iii) Power tool clean to achieve a minimum SSPC-SP11 bare metal power tool cleaned surface (ISO 8501-1 St3, SIS 05 5900 St3).

It is important to remove contaminants such as salt from above water surfaces.

2. COMBINING THE REACTIVE COMPONENTS

Transfer the entire contents of the Base and Solidifier modules on to the **Belzona® Working Surface**. Mix thoroughly together to achieve a uniform material free of any streakiness.

1. 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).

2. WORKING LIFE

From the commencement of mixing, **Belzona® 1161** must be used within the times shown below.

Temperature	Working Life
41°F/5°C	32 min.
50°F/10°C	24 min.
68°F/20°C	16 min.
86°F/30°C	14 min.
104°F/40°C	12 min.

3. MIXING SMALL QUANTITIES

For mixing small quantities of **Belzona® 1161** use:
2 parts Base to 1 part Solidifier by volume
4 parts Base to 1 part Solidifier by weight

4. VOLUME CAPACITY OF MIXED BELZONA® 1161
26.1 cu.in. (428 cm³) per kg.

3. APPLYING BELZONA® 1161

- a) Apply the **Belzona® 1161** directly on to the prepared surface with the plastic applicator or spatula provided.
- b) Press down firmly to fill all cracks, remove entrapped air, displace water and ensure maximum contact with the surface.
- c) Over cracks, gaps and holes, stipple in **Belzona® 9341** (Reinforcement Tape).
- d) Contour the **Belzona® 1161** to the correct profile with the plastic applicator or alternatively, allow to cure and then machine down.

APPLICATION AT LOW TEMPERATURES

Belzona® 1161 should NOT be applied at temperatures below 41°F (5°C).

CLEANING

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

4. COMPLETION OF THE MOLECULAR REACTION

Allow **Belzona® 1161** to solidify as below before subjecting it to the conditions indicated.

Temperature	Machining and/or light loading	Full mechanical or thermal loading
41°F/ 5°C	6 hours	4 days
50°F/10°C	4 hours	2 days
68°F/20°C	2 hours	1 day
86°F/30°C	1 hour	16 hours
104°F/40°C	½ hour	12 hours

These times are for a thickness of approximately 0.25 inch (6 mm); they will be reduced for thicker sections and extended for thinner sections.

5. APPLICATION OF A FURTHER LAYER OF BELZONA® 1161

When a further layer of **Belzona® 1161** is required, this should be applied as soon as possible after the first layer.

Application of subsequent layers of **Belzona® 1161** can be carried out up to 6 hours after the previous application without need of any surface treatment other than removal of contamination.

After the maximum overcoating time has elapsed, the solidified **Belzona® 1161** must be roughened before applying further **Belzona® 1161**.

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.

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 © 2017 Belzona International Limited. Belzona® is a registered trademark.

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

