Belzona 1161

FN10043 (SUPER UW-METAL)

BELZONA®
Repair • Protect • Improve

INSTRUCTIONS FOR USE

1. TO ENSURE AN EFFECTIVE MOLECULAR WELD

Belzona® 1161 is tolerant of surface preparation, however, it is recommended that the best possible surface preparation is carried out. As a minimum, substrate surface must always be clean and firm.

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.

ii) UHP Hydroblasting (2000 - 2500 bar) to remove previous coatings and expose original profile.

iii) Power tool clean (MBX Bristle Blaster, grinders etc.) in accordance with SSPC-SP3 to remove contamination and achieve a minimum SSPC-SP11 bare metal power tool cleaned surface (ISO 8501-1 grade St 3).

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	41°F (5°C)	59°F (15°C)	77°F (25°C)
Use all material within	35 min.	25 min.	15 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

26.3 cu.in. (431 cm^3) 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 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
59°F/15°C	3 hours	1½ days
68°F/20°C	2 hours	1 day
77°F/25°C	1½ hours	20 hours
86°F/30°C	1 hour	16 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 Material Safety Data Sheets.

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ISO 9001:2008
Q 09335
ISO 14001:2004
EMS 509612

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Printed in England Publication No. 38-03-15