Belzona 1121

(SUPER XL-METAL)

BELZONA®
Repair • Protect • Improve

INSTRUCTIONS FOR USE

1. TO ENSURE AN EFFECTIVE MOLECULAR WELD

APPLY ONLY TO CLEAN, FIRM, DRY AND WELL ROUGHENED SURFACES

a) Brush away loose contamination and degrease with a rag soaked in **Belzona® 9111** (cleaner/degreaser) or any other effective cleaner which does not leave a residue e.g. methyl ethyl ketone (MEK). Use a flame to sweat out oil from deeply impregnated surfaces.

b) Roughen surfaces by blast cleaning, deeply scoring or grinding.

c) Stabilize cracks by drilling the extremities. Long cracks should be drilled, tapped and bolted every 3-4 inches (77-103 mm).

d) Vee-out all cracks using a rotary file.

e) Finally degrease again. Use clean rags to avoid spreading contamination.

WHERE BELZONA® 1121 SHOULD NOT ADHERE

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

2. COMBINING THE REACTIVE COMPONENTS

Stir the contents of the Solidifier container thoroughly to reincorporate any separation. 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® 1121** 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	90 min.	60 min.	35 min.

3. MIXING SMALL QUANTITIES

For mixing small quantities of **Belzona® 1121** use:
1.0 parts Base to 1 part Solidifier by volume
1.2 parts Base to 1 part Solidifier by weight

4. VOLUME CAPACITY OF MIXED BELZONA® 1121

23.5 cu.in. (385 cm³) per kg.

3. APPLYING BELZONA® 1121

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.

a) Apply the **Belzona® 1121** directly on to the prepared surface with the plastic applicator or spatula provided.

b) Press down firmly to fill all cracks, remove entrapped air, and ensure maximum contact with the surface.

c) Over cracks, gaps and holes, stipple in **Belzona® 9341** (Reinforcement Tape).

d) Contour the **Belzona® 1121** to the correct profile with the plastic applicator or alternatively allow to cure and then machine down.

e) When **Belzona® 1121** is being used as an irregular shim, offer the two mating surfaces together as soon as **Belzona® 1121** has been applied. Remove excess with the spatula.

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® 1121** to solidify as below subjecting it to the conditions indicated.

Temper-ature	Movement or use involving no loading or immersion	Machining and/or light loading	Full mechanical or thermal loading	Immersion in chemicals
41°F/ 5°C	28 hours	4 days	10 days	24 days
50°F/10°C	15 hours	2 days	5 days	12 days
59°F/15°C	9 hours	27 hours	3 days	7 days
68°F/20°C	4¾ hours	16 hours	1½ day	4 days
77°F/25°C	2½ hours	9 hours	1 day	2½ days
86°F/30°C	1½ hours	5 hour	16 hours	1½ day

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® 1121

When a further layer of **Belzona® 1121** is required, this should be applied no longer than 1½ days after application of the first layer when the ambient temperature is 59-77°F (15-25°C).

At higher temperatures, this time will be reduced; at lower temperatures it will be extended.

After the maximum overcoating time has elapsed, the solidified **Belzona® 1121** must be roughened before applying further **Belzona® 1121**.

HEALTH & SAFETY INFORMATION
Please read and make sure you understand the relevant Material Safety Data Sheets.

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