1. TO ENSURE AN EFFECTIVE MOLECULAR WELD

a) SURFACE PREPARATION

(i) Metallic Surfaces
Remove all loose surface contamination and degrease with 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.

Grit blast to a minimum 3 mil (75 microns) profile. Where blasting is not practical, thorough mechanical grinding may be considered, except for applications involving tensile loads, such as expansion joints, and all applications involving immersion and/or fluid flow.

(ii) Flexible Surfaces (e.g. rubbers)
NOTE: Belzona® 9111 can draw processing oils and waxes to the surface of some rubbers, particularly when new, which then impairs adhesion of Belzona® 2131. Test for this on a small area. If, on rubbing with a rag moistened with Belzona® 9111, a greasy film appears, the surface should not be degreased, but simply abraded. Undercut fine edges with a sharp knife and scuff the surface with a rotary wire brush or suitable roughing tool.

Brush away loose contamination and degrease again with Belzona® 9111.

b) CONDITIONING
Immediately, apply a thin, even coat of Belzona® 2911 (Elastomer QD Conditioner) or Belzona® 2921 (Elastomer GP Conditioner) onto the surface. A brush should be used as a stipple to ensure a practical coverage rate of 13 sq.ft (1.25 m²) per unit, on steel and most metallic substrates. On well roughened rubber substrates this could be reduced by as much as 50%.

The Belzona® Conditioner must be touch dry before overcoating with Belzona® 2131. This will depend on the Belzona® Conditioner selected, prevailing temperature, relative humidity and substrate.

At 50% relative humidity, the touch dry state will be achieved after the times given below when applied to a steel surface. These times may be extended when applied to rubber substrates.

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Belzona 2911</th>
<th>Belzona 2921</th>
</tr>
</thead>
<tbody>
<tr>
<td>50°F (10°C)</td>
<td>90 mins</td>
<td>120 mins</td>
</tr>
<tr>
<td>68°F (20°C)</td>
<td>45 mins</td>
<td>75 mins</td>
</tr>
<tr>
<td>86°F (30°C)</td>
<td>25 mins</td>
<td>40 mins</td>
</tr>
<tr>
<td>104°F (40°C)</td>
<td>20 mins</td>
<td>25 mins</td>
</tr>
</tbody>
</table>

For lower relative humidity, the touch dry times will increase, for higher humidity they will be reduced.

Under no circumstances should application of Belzona® 2131 take place after the maximum overcoating time of 24 hours.

Note: Belzona® 2911 has an 18 month shelf life and Belzona® 2921 has a 24 month shelf life from date of manufacture when stored at 41-77°F (5-25°C) and must be used before the stated “use by” date.

When using Belzona® 2131 to overcoat a surface which has been treated with a Belzona® 1000 Series product (except Belzona® 1221 (Super E-Metal)), the Belzona® 1000 Series product must first be allowed to fully cure, the surface prepared as outlined in section 1 (a) (i), and Belzona® 2911 or Belzona® 2921 applied as outlined in section 1 (b).

Application of Belzona® 2131 over Belzona® 1221 can be carried out up to 4 hours after the application of Belzona® 1221 without the need of any surface treatment other than removal of contamination. When overcoating Belzona® 1221 after this time, the surface should be abraded, followed by conditioning as in Section 1 (b).

WHERE BELZONA® 2131 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
Both Base and Solidifier components must remain sealed until the application stage.

a) Empty the entire contents of the Base container into the mixing bowl provided.

b) Shake the Solidifier container thoroughly to re-incorporate any settlement. Pour the contents over the Base in the mixing unit.

www.belzona.com
c) Immediately mix together for at least 3 minutes and use all material within the times shown in the table below.

<table>
<thead>
<tr>
<th>Temperature</th>
<th>50°F (10°C)</th>
<th>68°F (20°C)</th>
<th>86°F (30°C)</th>
<th>104°F (40°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use all material within</td>
<td>20 min.</td>
<td>12 min.</td>
<td>9 min.</td>
<td>7 min.</td>
</tr>
</tbody>
</table>

VOLUME CAPACITY OF MIXED BELZONA® 2131
27.0 cu.in. (443 cm³) per 500g unit.

3. APPLYING THE BELZONA® 2131

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 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) Resurfacing
Apply the Belzona® 2131 to the prepared surface with a stiff bristled brush or the plastic applicator provided to give a coverage rate of approximately 19.05 sq.ft. (1.77 m²) per 500g unit at 10 mil (0.25 mm) thickness.

b) Casting
(i) Brush a thin coat of Belzona® 2131 onto the inside of the mold previously treated with Belzona® 9411.
(ii) Pour the remaining Belzona® 2131 into the mold, avoiding air entrapment, and then remove occluded air by vibrating the mold.

CLEANING
Mixing tools should be cleaned immediately after use with Belzona® 9111 or any other effective solvent e.g. Methyl ethyl ketone (MEK). 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® 2131 to solidify as below before subjecting it to the conditions indicated:

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Movement (no loading)</th>
<th>Light loading</th>
<th>Full mechanical loading</th>
<th>Immersion in chemicals</th>
</tr>
</thead>
<tbody>
<tr>
<td>50°F (10°C)</td>
<td>4 hours</td>
<td>16 hours</td>
<td>48 hours</td>
<td>96 hours</td>
</tr>
<tr>
<td>68°F (20°C)</td>
<td>2 hours</td>
<td>8 hours</td>
<td>24 hours</td>
<td>60 hours</td>
</tr>
<tr>
<td>86°F (30°C)</td>
<td>1½ hours</td>
<td>6 hours</td>
<td>20 hours</td>
<td>48 hours</td>
</tr>
<tr>
<td>104°F (40°C)</td>
<td>1 hour</td>
<td>4 hours</td>
<td>16 hours</td>
<td>36 hours</td>
</tr>
</tbody>
</table>

These times are for a thickness of approximately 0.10 ins (2.5mm); they will be reduced for thicker sections and extended for thinner sections.

5. STORAGE

Store in a dry environment at a temperature between 41°F (5°C) and 86°F (30°C).

Inadvertent storage of Belzona® 2100 Base below 41°F (5°C) may result in partial solidification. If this occurs, the material can be restored to its normal form by resealing the container and warming to between 104°F (40°C) and 122°F (50°C) for 3 hours in a well ventilated, dry area.

6. OVERCOATING

Application of subsequent layers of Belzona® 2131 can be carried out typically between a minimum of 2 hours and maximum of 3 days after the previous application without need of any surface treatment other than removal of contamination. Belzona® 2100 series products should never be applied “Wet on Wet”.

Aged or weathered Belzona® 2131 should be prepared and Conditioned as described for flexible surfaces in Section 1 above.