

# Belzona 1511

FN10178 (SUPER HT-METAL)



## INSTRUCTIONS FOR USE

### 1. TO ENSURE AN EFFECTIVE MOLECULAR WELD

#### APPLY ONLY TO BLAST CLEANED 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).
- b) Select an abrasive to give the necessary standard of cleanliness and a minimum depth of profile of 3 mils (75 microns).

Use only an angular abrasive.

- c) Blast clean the metal surface to achieve the following standard of cleanliness:

ISO 8501-1 Sa 2½ very thorough blast cleaning  
American Standard near white finish SSPC SP 10  
Swedish Standard Sa 2½ SIS 05 5900

- d) After blasting, metal surfaces should be coated before any oxidation of the surface takes place.

#### SALT CONTAMINATED SURFACES

Metal surfaces that have been immersed for any periods in salt solutions e.g. sea water, should be blasted to the required standard, left 24 hours to allow any ingrained salts to sweat to the surface and then washed prior to a further brush blast to remove these. This process may need to be repeated to ensure complete removal of salts. The soluble salt contamination of the prepared substrate, immediately prior to application, should be less than 20mgs/m<sup>2</sup>.

#### WHERE BELZONA® 1511 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

Transfer the entire contents of the Base and Solidifier containers onto the **Belzona®** Working Surface.

Mix the two components thoroughly to achieve a uniform material free of any streakiness.

#### NOTES:

1. **Belzona® 1511** should NOT be applied at temperatures below 50°F (10°C).

### 2. WORKING LIFE

From the commencement of mixing, **Belzona® 1511** must be used within the times shown below.

Temperature	50°F (10°C)	68°F (20°C)	86°F (30°C)	104°F (40°C)
Use all material within	120 min	60 min.	50 min.	40 min

### 3. MIXING SMALL QUANTITIES

5 parts Base to 1 part Solidifier by weight  
It is not recommended to measure out **Belzona 1511** by volume.

### 4. VOLUME CAPACITY OF MIXED BELZONA® 1511

23.4 cu.in. (383 cm<sup>3</sup>) per 1kg. unit.

### 3. APPLYING BELZONA® 1511

#### FOR BEST RESULTS

##### Do not apply when:

- i) The temperature is below 50°F (10°C) or the relative humidity is above 85%.
- ii) The substrate temperature is less than 5°F (3°C) above dewpoint.
- iii) Rain, snow, fog or mist is present.
- iv) There is moisture on the metal surface or is likely to be deposited by subsequent condensation.
- v) 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® 1511** 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) Contour the **Belzona® 1511** to the correct profile with the plastic applicator.

#### 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, and any other application tools should be cleaned using a suitable solvent such as **Belzona® 9121**, MEK, Acetone or cellulose thinners.

## 4. OVERCOAT TIMES

**Belzona® 1511** can be overcoated as soon as it is firm enough to do so. At 68°F (20°C) it will be possible to overcoat in 3-4 hours.

The maximum overcoat time is 24 hours. After this time the surface must be grit blasted to achieve a frosted appearance with a minimum surface profile of 40 microns before applying further material.

## 5. COMPLETION OF THE MOLECULAR REACTION

When overcoated with a Belzona high temperature coating, the **Belzona 1511** will post cure in service and the relevant cure schedule specified for the **Belzona** coating should be followed.

Alternatively allow **Belzona® 1511** to solidify as below before subjecting it to the conditions indicated.

Temperature	Light loading	Full mechanical or thermal loading	Immersion in chemicals
50°F/10°C	72 hours	Post cure required	Post cure required
68°F/20°C	18 hours	30 hours	Post cure required
86°F/30°C	5 hours	24 hours	60 hours
104°F/40°C	4 hours	6 hours	6 hours

Alternatively, allow to cure at ambient temperature before post curing for at least 1 hour at minimum 122°F (50°C). Temperature should not be increased at more than 55°F (30°C) per hour.

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### HEALTH & SAFETY INFORMATION

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

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