

## 1 SURFACE PREPARATION

### 1.1 AREAS PROTECTED WITH OTHER BELZONA COATINGS

- Apply **Belzona 5115** directly onto any surface previously coated or repaired with a Belzona product (e.g., **Belzona 5811**, **Belzona 5815**, **Belzona 3921**) so long as the application takes place within their respective overcoat windows.
- If overcoat windows are exceeded, treat the cured surface of the Belzona product in accordance with its respective IFU prior to top coating with **Belzona 5115**.

### 1.2 METALLIC SURFACES

- Brush away loose contamination.
- Degrease with **Belzona 9111** (Cleaner/Degreaser) or any other effective cleaner which does not leave a residue e.g., methyl ethyl ketone (MEK).
- Power-tool clean the metallic surface in accordance with SSPC SP 11 (Power Tool Cleaning to Bare Metal) to achieve a rough profile depth of 1 -2 mil (25 - 50 µm).
- For any other desired surface preparation, contact Belzona.
- Maintain the prepared condition of the surface until commencement of the application. If not, clean the surface again.

Note: It is recommended that additional corrosion protection be used under **Belzona 5115** on ferrous substrates. **Belzona 6111** or **Belzona 3921** may be used for such a purpose.

### 1.3 NON-METALLIC SURFACES (e.g., SuperWrap II, PVC, GRP or other fiber-reinforced plastics, and concrete)







- Abrade the surface with a rotary wire brush, MBX, coarse sandpaper, or any suitable roughing tool.
- Brush away any loose contamination.

## 2 APPLICATION PROCEDURE

### 2.1 COLORING SYSTEM

For achieving finish colors other than grey and white, the neutral version of **Belzona 5115** is recommended. When tinting this version, it is advised that the colorant be added first to the base, then thoroughly mixed, before transferring the contents of the solidifier into the base.

The neutral version of **Belzona 5115** is not a finished product. It must be tinted before use. Belzona recommends using the Chroma-Chem UCD® PS line of colorants for this purpose. Other colorants for use in polysiloxane coatings may be considered. Contact Belzona for more details. As a guide, 2-6% by volume of colorant per total volume of **Belzona 5115** should be sufficient for an optimum color. Using the medium scoop provided, follow the table below to achieve the required volume of colorant per 0.75 L total volume of **Belzona 5115**.

Volume	Quantity of Scoops
2%	
4%	 
6%	  

If coating over a dark color with a light color tint of **Belzona 5115**, it is recommended that a coat of **Belzona 5115 (White)** first be used to lighten the underlying coating. Then, the final light color tint of **Belzona 5115** should be applied.

### 2.2 MIXING

- Transfer the entire contents of the solidifier container into the base container.
- Mix thoroughly to achieve a uniform material, free of any streakiness.

For mixing small quantities of **Belzona 5115**, use:

Mixing Ratio	By Volume	By Weight
Base: Solidifier	3: 1	4.5: 1

### 2.3 WORKING LIFE

From the commencement of mixing, **Belzona 5115** must be used within the times shown below.

Temperature	41 °F (5 °C)	50 °F (10 °C)	68 °F (20 °C)	86 °F (30 °C)	104 °F (40 °C)
Use material within	5 h.	4 h.	3 h.	2 h.	1 h.

Once mixed, **Belzona 5115** can be transferred to a lidded container to extend its working life. Generally, the times above can be doubled if a lid is applied while the product is not being used. Surface skinning may be observed. If any skin forms, remove using a brush or an applicator.

### FOR BEST RESULTS

#### Do not apply when:

- The temperature is below 41 °F (5 °C) regardless of relative humidity.
- Rain, snow, fog, or mist are present.
- There is moisture on the metal surface or is likely to be deposited by subsequent condensation.
- The working environment is likely to be contaminated by oil/grease from adjacent equipment or smoke from kerosene heaters or tobacco smoking.

### 2.4 HAND APPLICATION

- Apply **Belzona 5115** directly onto the surface to be top coated with a fine finish\* paint brush at an even thickness. Refer to coverage rates in section 2.6.

\* Coarse bristle brushes may leave brush strokes which could, in turn, affect the ability of **Belzona 5115** to completely mask the underlying coating or substrate.

- Use a WFT gauge to achieve the recommended wet film thickness. Brush out any WFT gauge tooth marks left behind.
- A second coat of **Belzona 5115** may be applied for a smoother finish, if needed, in a crosshatch style with respect to the first coat. Refer to overcoat times in section 2.7.
- Remember that the working life of **Belzona 5115** can be extended if the mixed product container is lidded while not in use. Refer to section 2.3 above.

### 2.5 SPRAY APPLICATION

Note: Spray application is highly recommended to achieve smooth and even finishes.

Large areas may be coated by spray using airless sprayers such as Graco Magnum X5, X7, or similar. Graco air-assisted gravity feed HPLV spray guns or similar can also be used, preferably for small areas.

#### Mix ratio

#### Tip minimum pressure

#### (Air-assisted gravity feed) tip size

#### (Airless spray) tip size

#### Cleaning solvent

3: 1 by volume

65 psi (4.5 bar)

39 thou (1.0 mm)

16 - 19 thou (0.4 - 0.5 mm)

**Belzona 9121**, MEK, or acetone

[DO NOT THIN]

Only commence mixing once the spray equipment has been assembled and tested – Scan or click on the QR code to access **Airlessly Spraying Belzona Products – Instructions & Recommendations.**



## 2.6 COVERAGE RATES

In practice, many factors such as porosity, roughness, and profile, influence the exact coverage rate achieved.

Number of coats	1	2
Wet film thickness (WFT) per coat	3.0 mil (75 µm)	3.0 mil (75 µm)
Dry film thickness (DFT) per coat	2.7 mil (68 µm)	2.7 mil (68 µm)
Minimum total WFT	3.0 mil (75 µm)	5.0 mil (125 µm)
Maximum total WFT	5.0 mil (125 µm)	8.0 mil (200 µm)
Theoretical coverage rate per coat	140 ft <sup>2</sup> /L (13 m <sup>2</sup> /L)	

## 2.7 OVERCOAT TIMES

Should an additional coat of **Belzona 5115** be required, the first coat can be overcoated as soon as it is firm enough to do so. This time will vary depending on the temperature and relative humidity.

Temperature	< 50% RH	> 50% RH
Up to 68 °F (20 °C)	6 hours	4 hours
Up to 86 °F (30 °C)	4 hours	2 hours
Up to 104 °F (40 °C)	2 - 4 hours	1 - 2 hours

The maximum overcoat time is 72 hours. If the maximum overcoat time is exceeded, the surface of the coating must be lightly sanded to achieve a gloss-free appearance and loose dust removed before applying the following coat.

## 2.8 THINNING

**Belzona 5115** must not be thinned at any time.

# 3 INSPECTION AND REPAIRS

## 3.1 INSPECTION

- Immediately after application of **Belzona 5115**, visually inspect for misses. Where detected, these should be immediately brushed out or sprayed.
- If required or specified, low-voltage wet sponge test **Belzona 5115** in accordance with NACE SP0188 to confirm its continuity. A voltage of 90 V (DC) is recommended.

## 3.2 REPAIRS

Within the overcoating window, any misses or mechanical damage can be repaired by application of a further coat of **Belzona 5115**. Outside the overcoating window, the surface of **Belzona 5115** must be sanded to produce a gloss-free appearance before re-coating.

## 3.3 AVAILABLE COLORS

**Belzona 5115** is available in two colors (white and gray) as a finished product, and in a neutral shade for achieving other industrial finish colors.

# 4 CURING AND CLEANING

## 4.1 CURING

Curing times of **Belzona 5115** are affected by both relative humidity (RH) and ambient temperature, as shown below.

Ambient temperature	FULL CURE TIMES (days)		
	RELATIVE HUMIDITY (%)		
	30	50	70
41 °F (5 °C)	<u>POST CURING REQUIRED</u>		
50 °F (10 °C)			
59 °F (15 °C)	35	32	30
68 °F (20 °C)	11	9	8
86 °F (30 °C)	8	7	6
104 °F (40 °C)	4	4	4

## 4.2 POST CURING

Post-cure is required when the temperature is below 59 °F (15 °C) regardless of relative humidity.

- Belzona 5115** should be post cured using any source of dry heat, e.g., forced dry air heaters and heat lamps.
- Heat the coating up to any temperature between 104 °F (40 °C) and 122 °F (50 °C) for a minimum of 24 hours.
- Ensure heat is not directed toward specific coated areas but rather to the entire coating.

## 4.3 CLEANING

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

# 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.

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