Belzona 5841

FN10103

INSTRUCTIONS FOR USE

1. TO ENSURE AN EFFECTIVE MOLECULAR WELD

Belzona® 5841 is tolerant of surface preparation. However, it is recommended that the best possible surface preparation is always achieved. As a minimum, substrate surface must be coating-free, clean, firm and have a profile of 25 micron (1.0 mil).

RECOMMENDED PROCEDURE

i) Brush away loosely adherent contamination.

ii) Degrease with a rag soaked in **Belzona® 9111** (cleaner/degreaser) or any other effective cleaner which does not leave a residue behind, e.g. methyl ethyl ketone (MEK).

iii) If required, use an additional heat source to sweat out oil from deeply impregnated surfaces.

PREFERRED SURFACE PREPARATION METHOD

iv) 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)

ALTERNATIVELY

v) Power tool clean the surface to the requirements of SSPC-SP15 (Commercial Grade Power-Tool Cleaning).

WHERE BELZONA® 5841 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 Solidifier container into the Base container. Mix thoroughly together to achieve a uniform material free of any streakiness.

NOTES:

1. MIXING AT LOW TEMPERATURES
To ease mixing when the material temperature is below 10°C (50°F), warm the Base and Solidifier modules until the contents attain a temperature of 20-25°C (68-77°F).

2. APPLICATION TEMPERATURES
Belzona® 5841 is designed to be applied to warm surfaces between 30°C and 80°C (86°F and 176°F).

3. WORKING LIFE
From the commencement of mixing, **Belzona® 5841** must be used within the times shown below.

Temperature	10°C (50°F)	20°C (68°F)	30°C (86°F)
Use all material within	2 hours	1 hour	30 min

4. MIXING SMALL QUANTITIES
For mixing small quantities of **Belzona® 5841** use:
4 parts Base to 1 parts Solidifier by volume
8.5 parts Base to 1 parts Solidifier by weight

3. APPLYING BELZONA® 5841

FOR BEST RESULTS
Do not apply when:
(i) Rain, snow, fog or mist is present.
(ii) There is moisture on the metal surface or is likely to be deposited by subsequent condensation.
(iii) The working environment is likely to be contaminated by oil/grease from adjacent equipment or smoke from kerosene heaters or tobacco smoking.

a) FIRST COAT
Apply the **Belzona® 5841** directly on to the hot prepared surface with a short bristled brush. The substrate temperature must be between 30°C and 80°C (86°F and 176°F) for acceptable cure.

The applied coating thickness will depend on the substrate temperature, see below. Use a wet film thickness gauge to regularly check that the correct film thickness is being achieved.

Substrate temperature	Wet Film Thickness/coat	Theoretical coverage rate/coat
30°C (86°F)	200 microns (8 mils)	2.5 m²/kg (27 sq.ft./kg)
50°C (122°F)	150 microns (6 mils)	3.31 m²/kg (35.6 sq.ft./kg)
80°C (176°F)	100 microns (4 mils)	4.98 m²/kg (53.6 sq.ft./kg)

b) SECOND COAT

As soon as possible after application of the first coat, apply a further coat of **Belzona® 5841** as in (a) above. The minimum overcoating time will be dependent on the temperature of the substrate, as indicated in the table below:

Substrate temperature	Touch dry time
30°C (86°F)	2½ hours
50°C (122°F)	1 hour
80°C (176°F)	20 min

The maximum recommended overcoating time is 24 hours, irrespective of cure temperature.

A minimum of two coats with a total DFT ≥200 microns (≥8 mils) should be applied. Maximum DFT only limited by sag resistance and practical application thicknesses.

c) THEORETICAL COVERAGE RATES

Coverage rate is also dependent on substrate temperature. For a two coat system:

Substrate temperature	Theoretical coverage rate
30°C (86°F)	1.25 m²/kg (13.5 sq.ft.)
50°C (122°F)	1.66 m²/kg (17.8 sq.ft.)
80°C (176°F)	2.49 m²/kg (26.8 sq.ft.)

d) PRACTICAL COVERAGE RATES

In practice many factors influence the exact coverage rate achieved. On rough surfaces such as pitted steel the coverage rate achieved may be reduced by up to 20%.

NOTE:
CLEANING

Brushes or 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

Belzona® 5841 will continue to cure whilst the substrate remains hot. Cure times will depend on the substrate temperature, as indicated in the table below:

Substrate temperature	Touch dry/Light loading	Full cure
30°C (86°F)	2½ hours	24 hours
50°C (122°F)	1 hour	16 hours
80°C (176°F)	20 min.	8 hours

HEALTH & SAFETY INFORMATION

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

Belzona products are manufactured under an ISO 9001 Registered Quality Management System

BELZONA®
Repair • Protect • Improve