# Belzona 1341N

## (SUPERMETALGLIDE)

Certified to NSF/ANSI 61

BELZONA®
Repair • Protect • Improve

# INSTRUCTIONS FOR USE

## *1. TO ENSURE AN EFFECTIVE MOLECULAR WELD*

**i) METALLIC SURFACES - 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 30mgs/m².

**ii) SURFACES ALREADY REBUILT WITH BELZONA® 1111 (SUPER METAL)**

a) If overcoating takes place within 2 hours, no further surface preparation is required.

b) After this maximum overcoating time has elapsed roughen the **Belzona® 1111,** preferably by brush blasting before applying **Belzona® 1341N.**

## *2. COMBINING THE REACTIVE COMPONENTS*

a) Stir the contents of the Base container thoroughly to reincorporate any settlement.

b) Transfer the entire contents of the Solidifier can into the Base module.

c) Mix thoroughly together to achieve a uniform material free of any streakiness.

**NOTES:**

**1. MIXING LARGE UNITS**

When mixing 5 kg. units of **Belzona® 1341N,** use a mechanical mixer, ensuring that material on the side and at the corners of the container is fully incorporated. Avoid incorporation of excessive amounts of air into the mixed material.

**2. MIXING AT LOW TEMPERATURES**

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

**3. WORKING LIFE**

From the commencement of mixing, **Belzona® 1341N** must be used within the times shown below.

| Temperature | 50°F (10°C) | 59°F (15°C) | 77°F (25°C) | 86°F (30°C) |
|---|---|---|---|---|
| Use all material within | 70 min. | 50 min. | 25 min. | 16 min. |

**4. MIXING SMALL QUANTITIES**

For mixing small quantities of **Belzona® 1341N** use:
3 parts Base to 2 parts Solidifier by volume
2 parts Base to 1 part Solidifier by weight

**5. VOLUME CAPACITY OF MIXED BELZONA® 1341N**

31.73 cu.in. (520 cm³) per 750g unit
212 cu.in. (3.475 liters) per 5 kg unit

## *3. APPLYING BELZONA® 1341N*

**FOR BEST RESULTS**

**Do not apply when:**

i) The temperature is below 50°F (10°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) **FIRST COAT**

Apply the **Belzona® 1341N** directly on to the prepared surface with a stiff bristled brush or with the plastic applicator provided. To achieve the correct film thickness of 10 mil (250 microns), a practical coverage rate of 19.5 sq. ft (1.8 m²) per 750g unit or 130 sq. ft (12 m²) per 5 kg unit should be obtained.

b) **SECOND COAT**
As soon as possible after application of the first coat, apply a further coat of **Belzona® 1341N** as in (a) above. This time will be approximately 4 hours at 68°F (20°C). The first coat must not be left longer than 24 hours before overcoating, irrespective of temperature. Should this occur, then the surface should be brush blasted or abraded before commencing application.

**SPRAY APPLICATION**
On suitable areas, **Belzona® 1341N** may be applied by heated airless spray. Typical set up would be 63:1 airless spray unit with either in-line heater or trace heated lines capable of raising product temperature to at least 122°F (50°C). Solvent must **NOT** be added. Please contact Belzona direct for more specific information.

**COLOR**
**Belzona® 1341N** is available in blue and gray to facilitate application and to prevent misses. These colors are for identification only and there will be some variation between batches. In service the color of the applied product may change.

**CLEANING**
Mixing tools should be cleaned immediately after use with **Belzona® 9111** or any other effective solvent e.g. Methyl ethyl ketone (MEK). Brushes, 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® 1341N** to solidify as below subjecting it to the conditions indicated.

| Temperature | Movement or use involving no loading or immersion | Light loading | Full mechanical/ thermal loading or water immersion | Chemical contact |
|---|---|---|---|---|
| 50°F/10°C | 24 hours | 48 hours | 14 days | 21 days |
| 59°F/15°C | 12 hours | 24 hours | 7 days | 10 days |
| 68°F/20°C | 8 hours | 16 hours | 3 days | 7 days |
| 77°F/25°C | 7 hours | 14 hours | 2½ days | 6 days |
| 86°F/30°C | 6 hours | 12 hours | 2 days | 5 days |

## *5. FINAL SOLIDIFICATION OF BELZONA® 1341N*

When time is important and equipment usage is pressing, then by installing forced air heaters and taking steps to contain this heat around the equipment being reclaimed, final solidification time can be as little as 24 hours. Application of heat should not be carried out until the **Belzona® 1341N** has initially gelled (typically 4 hours at 68°F (20°C) and the material temperature should not exceed 122°F (50°C).

Due allowance must be made for "warming up".
If there is any doubt regarding final solidification then **BE SAFE - MAKE MORE TIME.**

**BELZONA® 1341N IS CERTIFIED FOR CONTACT WITH POTABLE WATER SUBJECT TO THE FOLLOWING RESTRICTIONS:**

NSF®
Certified to NSF/ANSI 61

**For use on:**
**Distribution line pumps with a minimum daily output of 4800 gallons per square foot of coated pump surface area.**

**Tanks of ≥ 100,000 gallons.**

**Valves ≥ 4in.**

**HEALTH & SAFETY INFORMATION**
Please read and make sure you understand the relevant Material 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.

Nothing in the foregoing statement shall exclude or limit any liability of Belzona to the extent such liability cannot by law be excluded or limited.

Copyright © 2013 Belzona International Limited. Belzona® is a registered trademark.

BSI
*ISO 9001:2008*
*Q 09335*
*ISO 14001:2004*
*EMS 509612*
*Manufactured under an ISO 9000 Registered Quality Management System*

BELZONA®
Repair • Protect • Improve


Printed in England Publication No. 06-04-13