

PRODUCT SPECIFICATION SHEET

BELZONA 3111

FN10205



GENERAL INFORMATION

Product Description:

A single component formulated water based acrylic emulsion polymer used in conjunction with **Belzona 3911** (PSC Surface Conditioner) or **Belzona 3921** (GSC Surface Conditioner) and **Belzona 9311** (Reinforcing Sheet) when necessary.

This liquid base binds to the **Belzona 9311** to form a tough, flexible and elastic polymeric film which can tightly follow all roof contours. For preventive maintenance and repairs, the system provides long term weatherproofing and water proofing of almost all types of roof substrate and offers outstanding protection against infrared and ultra-violet radiation, and natural and industrial pollutants. It is impermeable to liquid water, but permeable to water vapor, thus allowing a moist roof to breathe. Also used to water and weatherproof non-roof structures such as storage tank bases.

This product has been tested and approved by a third party in accordance with ASTM D6083.

Application Areas:

When applied as detailed in the Belzona Instructions for Use (IFU), the system is ideally suited for application to the following:

Protection of insulation on:

- | | | |
|----------------|-------------------|---------------------------|
| - Gutters | - Parapet Walls | - Glazing Bars |
| - Joints | - Seams | - Flashings |
| - Ponded Areas | - Flat Roof Areas | - Complex Roofs and Domes |
| | | - Tank Base Sealing |

APPLICATION INFORMATION

Drying Time

Applied under good drying conditions, will be water resistant within 60 minutes of application. Under cool or humid conditions, this time will be extended. The product should not be applied when the relative humidity is above 90% or the surface temperature is below 41°F (5°C).

Coverage Rates

The first layer is applied to a dry film thickness of 10 mil (250 micron). This dry film thickness measurement includes the synthetic reinforcing sheet. The second layer should be applied to a dry film thickness of 6 mil (150 micron), giving an overall film thickness of approximately 16 mil (400 micron). Refer to the IFU for a guide to practical coverage rates.

Properties

Appearance	Thixotropic liquid
Colour	Available in White and Light Grey
Odour	Very slight ammoniacal
Viscosity	28,000 - 48,000 cp at 73.4°F (23°C)
Density	1.33 - 1.36 g/cm ³
Solids:	
by weight	64 - 67%
by volume	51 - 54%
Solvent	Water
Freezing point	32°F (0°C)

The above application information serves as introductory guide only. For full application details including the recommended application procedure/technique, refer to the Belzona IFU which is enclosed with each packaged product.

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WEATHERING RESISTANCE

After 1000 hours ASTM D4798 accelerated weathering typical values for unreinforced film in accordance with ASTM D412 (Die C) will be:

Elongation	167%
Tensile Strength	285 psi (2.0 N/mm ²)

LOW TEMPERATURE FLEXIBILITY

After 1000 hours ASTM D4798 accelerated weathering, low temperature flexibility per ASTM D522 at -26°C will typically be:

Mandrel Bending	<0.5 in
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ELONGATION & TENSILE PROPERTIES

Elongation

The elongation of the system after 7 days cure at 73.4°F (23°C) when tested in accordance with ASTM D412 will typically be:

Unreinforced	168%
Reinforced Crosswise	57%
Reinforced Lengthwise	40%

Tensile Strength

The tensile strength of the system after 7 days at 73.4°F (23°C) when tested in accordance with ASTM D412 will typically be:

Unreinforced	250 psi (1.7 N/mm ²)
Reinforced Crosswise	582 psi (4.0 N/mm ²)
Reinforced Lengthwise	1110 psi (7.7 N/mm ²)

WATER VAPOR TRANSMISSION/PERMEANCE

When tested in accordance with ASTM D1653, the water vapor transmission after 14 days cure at 73.4°F (23°C) will typically be:

Unreinforced	12.6 Perms
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SHELF LIFE

Belzona 3111 shall have a shelf life of 5 years from date of manufacture when stored in original unopened containers between 41°F (5°C) and 86°F (30°C).

TEAR STRENGTH

The Tear Strength of the system after 7 days at 73.4°F (23°C) when tested in accordance with ASTM D624 will typically be:

Unreinforced	81 pli (14 N/mm)
Reinforced Crosswise	188 pli (33 N/mm)
Reinforced Lengthwise	213 pli (37 N/mm)

WET ADHESION

When applied in conjunction with **Belzona 3911** or **Belzona 3921** and immersed in water for 336 ± 12 hours after film is fully cured, the adhesion values in accordance with ASTM C794/D903 will typically be:

Galvanized Steel N/mm)	2.9 pli (0.51 N/mm)
Concrete N/mm)	3.2 pli (0.56 N/mm)
APP Smooth	3.7 pli (0.65 N/mm)
APP Granule	2.3 pli (0.40 N/mm)
SBS Smooth N/mm)	2.8 pli (0.49 N/mm)
SBS Granule	2.8 pli (0.49 N/mm)

APPROVALS / ACCEPTANCES

The material has received recognition from the following organization:

Belzona 3111 (White & Light Grey) Flexible Membrane:



Miami-Dade NOA No.: 21-0309.05
Expiration Date: 02/13/2025

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WARRANTY

This product will meet the performance claims stated herein when material is stored and used as instructed in the Belzona Information For Use leaflet. Belzona ensures that all its products are carefully manufactured to ensure the highest quality possible and are tested strictly in accordance with universally recognized standards (ASTM, ANSI, BS, DIN, ISO, etc.). Since Belzona has no control over the use of the product described herein, no warranty for any application can be given.

AVAILABILITY AND COST

Belzona 3111 is available from a network of Belzona Distributors throughout the world for prompt delivery to the application site. For information, consult the Belzona Distributor in your area.

HEALTH AND SAFETY

Prior to using this material, please consult the relevant Safety Data Sheets.

MANUFACTURER / SUPPLIER

Belzona Inc.
14300 NW 60th Ave,
Miami Lakes, FL, 33014, USA

Belzona Polymerics Ltd.
Claro Road, Harrogate, HG1
4DS, UK

TECHNICAL SERVICE

Complete technical assistance is available and includes fully trained Technical Consultants, technical service personnel and fully staffed research, development and quality control laboratories.

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.

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Quality Management System*

