

# PRODUCT SPECIFICATION SHEET

## BELZONA 3121

FN10130



### GENERAL INFORMATION

#### Product Description:

A two-component emergency repair and weatherproofing system for sealing all types of roof surfaces and structures against atmospheric attack even during adverse weather conditions. Designed for instant waterproofing at all times of the year. Used in conjunction with **Belzona 9331**, a synthetic reinforcing sheet used to bridge roof contours and control film thickness.

#### Application Areas:

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

- Roofs
- Glazing bars
- Flashings
- Gutters
- Joints
- Parapet walls
- Seams

### APPLICATION INFORMATION

#### Working Life

Will vary according to temperature. At 68°F (20°C) the usable life of mixed material is typically 2 hrs.

#### Coverage Rate

The theoretical coverage rate for a single layer is 21 sq.ft. (2.0 sq.m.) per liter when applied at a dry film thickness of 12.5 mil (317 micron) on a smooth surface. Refer to the IFU for a guide to practical coverage rates.

#### Cure Time

The system is water resistant immediately after application. Refer to the IFU for the time taken for it to develop ultimate adhesive and mechanical properties.

#### Base Component

Appearance Thixotropic liquid  
Color Gray  
Density 1.61 - 1.63 g/cm<sup>3</sup>  
Viscosity 86 - 94 poise at 104°F (40°C)

#### Solidifier Component

Appearance Clear liquid  
Color Yellow  
Density 0.97 - 1.01 g/cm<sup>3</sup>  
Viscosity 7.5 - 11.5 Cp at 68°F (20°C)

#### Mixed Components

Mixing Ratio by Weight (Base : Solidifier) 3.6 : 1  
Mixing Ratio by Volume (Base : Solidifier) 2.2 : 1

**Sag Resistance** 15 mils (375 microns) minimum

#### Belzona 9331 (MR7 Reinforcing Sheet)

Material type Spun bonded 100% polypropylene  
Finish Untreated  
Width 17.0 - 17.5 cm or 44.0 - 44.5 cm  
Weight 38 - 42 g/m<sup>2</sup>

*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.*

# PRODUCT SPECIFICATION SHEET

## BELZONA 3121

FN10130



### CHEMICAL ANALYSIS

The mixed **Belzona 3121** has been independently analyzed for halogens, heavy metals, and other corrosion-causing impurities, with the following typical results:

Analyte	Total Concentration (ppm)
Fluoride	35
Chloride	92
Bromide	ND (<12)
Sulfur	28425
Nitrite	ND (<9)
Nitrate	ND (<9)
Zinc	20.9
Arsenic	9.8
Antimony, Bismuth, Cadmium, Lead, Tin, Silver, Mercury, Gallium and Indium	ND (<3.0)

ND : Not Detected

### ELONGATION PROPERTIES

When tested to ASTM D412 (Die C) is typically:

(i)	Reinforced	150%
(ii)	Unreinforced	400%

### FLEXIBILITY

Maintains flexibility down to -8°F (-22°C) passing ASTM D522 mandrel test at minimum 3.2mm diameter.

### HARDNESS

#### Shore A

When determined in accordance with ASTM D2240, typical value will be:  
35 after 24 hours cure at 68°F (20°C).

### TEAR STRENGTH

#### Tear Strength

When tested to ASTM D624 (Die C) is typically:

(i)	Reinforced	180 pli (3229 kg/m)
(ii)	Unreinforced	140 pli (2512 kg/m)

### TENSILE PROPERTIES

#### Tensile Strength

When tested to ASTM D412 (Die C) is typically:

(i)	Reinforced	800 psi (5.5 MPa)
(ii)	Unreinforced	1140 psi (7.9 MPa)

### WATER VAPOR PERMEABILITY

When tested to ASTM D1653 water vapor permeability is typically:

17 g/m<sup>2</sup>/24 hrs for the standard reinforced system.

### WEATHERING RESISTANCE

Approximately two thirds of the original elongation will be maintained after exposure to 1,000 hours of artificial weathering according to ISO 11341.

### SHELF LIFE

Separate base and solidifier components shall have a shelf life of 5 years from date of manufacture when stored in their original unopened containers between 32°F (0°C) and 86°F (30°C).

### APPROVALS/ACCEPTANCES

The material has received recognition from organizations worldwide including:

U.S.D.A.  
LEAD SHEET ASSOCIATION

# PRODUCT SPECIFICATION SHEET

## BELZONA 3121

FN10130



### 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 3121** 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 Material Safety Data Sheets.

### MANUFACTURER

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

Belzona Inc.  
2000 N.W. 88<sup>th</sup> Court,  
Miami, Florida, USA, 33172

### 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.

Copyright © 2016 Belzona International Limited. Belzona® is a registered trademark.

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

