

# PRODUCT SPECIFICATION SHEET

## BELZONA 5131

FN10166



### GENERAL INFORMATION

#### Product Description:

A modified acrylic emulsion that incorporates hollow borosilicate microspheres to produce a lightweight weather resistant thermal protection system.

**Belzona 5131** was specifically developed to combat exterior water penetration and with its low carbon dioxide permeability reduce the risk of carbonation.

The low thermal conductivity of **Belzona 5131** together with its low heat capacity means cold surfaces treated with the material feel warmer and hot surfaces feel cooler.

#### Application Areas:

This coating is ideal for upgrading the appearance of walls and structures. Other applications include:

- Metal roofs and cladding
- Ducting and pipework
- Cold pipework
- External tanks
- Ceilings and underside of roofs
- Cellars and basements

### APPLICATION INFORMATION

**Belzona 5131 is used in conjunction with Belzona 3911 (Porous Surface Conditioner) to ensure optimum adhesion to the substrate.**

#### Coverage Rate

An average dry film thickness for **Belzona 5131** System of 8 mil (200 micron) should be aimed for.

The coverage rate depends nature and profile of substrate. Refer to the Belzona IFU for guidance on practical coverage rates.

#### Drying Time

Applied under good drying conditions, will be water resistant within 30 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 80% or the surface temperature is below 41°F (5°C).

#### A one component product

Appearance	Thixotropic liquid
Color	Limestone White
Density	0.90 - 0.98 g/cm <sup>3</sup>
Gel strength at 68°F (20°C)	100 - 160 g/cm
Freezing point	32°F (0°C)
Solids content by weight	56 - 58%

*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 5131

FN10166



### ELONGATION & TENSILE PROPERTIES

#### Elongation at Break

The elongation of the system after 7 days cure at 68°F (20°C) when tested against BS 2782 or similar test method is typically, 960%

#### Tear Strength

The tear strength of the system after 7 days cure at 68°F (20°C) is typically, 80 pli (1425kg/m).

#### Tensile Strength

The tensile strength of the system after 7 days at 68°F (20°C) when tested against BS 2782 or similar test method is typically, 190 psi (1.31 MPa).

### SHELF LIFE

When stored in unopened containers between 41°F (5°C) and 86°F (30°C), this material is expected to have a shelf life of at least 5 years.

### THERMAL PROPERTIES

#### Thermal Conductivity

The table below provides comparative figures between **Belzona 5131** and traditional materials:

Material	Thermal Conductivity (W/m/°K)
<b>Belzona 5131</b>	0.105
White Chlor-Rubber Paint	0.474
Concrete	0.864-1.296
Building Brick	0.432-0.864
Glass	0.720-0.864
Plaster	0.288-0.726

#### Thermal Imagery Testing

Independent thermographic tests measured heat transfer using an infra-red camera. It was demonstrated that there is a substantially lower degree of heat transfer as compared to conventional coatings.

# PRODUCT SPECIFICATION SHEET

## BELZONA 5131

FN10166



### WARRANTY

Belzona guarantees 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 further guarantees that all its products are carefully manufactured to ensure the highest quality possible and tested strictly in accordance with universally recognised 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 5131** 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 © 2014 Belzona International Limited. Belzona® is a registered trademark.



ISO 9001:2008  
Q 09335  
ISO 14001:2004  
EMS 509612

Manufactured under an ISO 9000  
Registered Quality Management System

