

# PRODUCT SPECIFICATION SHEET

## BELZONA 9631

FN10194



### GENERAL INFORMATION

#### Product Description:

**Belzona 9631** is a fast setting, ready to use glass fibre composite, pre-impregnated with a water activated resin.

#### Application Areas:

The system is suited for application to:

- Leaking pipes
- Cracked pipes
- Corroded pipes
- Pipe elbows
- Irregular pipe fittings
- T-pieces
- Underwater repairs

### APPLICATION INFORMATION

#### Working Life

Will vary according to temperature. At 68°F (20°C), the working life will typically be 3 minutes.

#### Cure Time

The cure time of Belzona 9631 is dependent on humidity and temperature, consult the Belzona IFU for more details.

#### Properties

Appearance  
Colour  
Size

Resin impregnated glass fibre  
White  
5 x 150cm

*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.*

### ADHESION

#### Tensile Shear Adhesion

The Tensile Shear Adhesion on metal and plastic substrates as determined in accordance with ASTM D1002, following cure at 68°F/20°C, will typically be:

Substrate	Ground (SSPC-SP11) (ISO 850-1 St3)
Dry Mild Steel	750 psi / 5.2 MPa
Wet Mild Steel	990 psi / 6.8 MPa
Dry Copper	330 psi / 2.3 MPa
Wet Copper	850 psi / 5.9 MPa
Dry Stainless Steel	980 psi / 6.8 MPa
Wet Stainless Steel	1040 psi / 7.2 MPa
Dry GRP	360 psi / 2.5 MPa
Wet GRP	490 psi / 3.4 MPa

#### Tensile Shear Adhesion (Immersion)

The Tensile Shear Adhesion on ground mild steel, as determined in accordance with ASTM D1002 measured after 1000 hours immersion in water at 104°F/40°C will typically be:

Cure (Test) temperature	Tensile Shear Adhesion
104°F/40°C (68°F/20°C)	1170 psi / 8.1 MPa

### FLEXURAL PROPERTIES

When determined in accordance with ASTM D790, following cure at 68°F/20°C, typical values for **Belzona 9631** tested as a nine-layer composite will be:

**Flexural Strength** 23.8 x 10<sup>3</sup> psi / 165 MPa  
**Flexural Modulus** 22.3 x 10<sup>5</sup> psi / 15380 MPa

### HARDNESS

#### Shore D

When determined in accordance with ASTM D2240, typically value will be:  
60 68°F (20°C) cure

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### HEAT RESISTANCE

#### Heat Distortion Temperature (HDT)

Tested to ASTM D648 (264 psi fibre stress), typical value obtained will be:

150°F (66°C)

68°F (20°C) cure

### TENSILE STRENGTH

When determined in accordance with ASTM D412 (Die C), the tensile strength will typically be:

36.2 x 10<sup>3</sup> psi / 250 MPa

68°F (20°C) cure

### PRESSURE RETENTION

When tested on a 76mm/3-inch diameter pipe, prepared to SSPC-SP11, with a defect up to 6mm diameter, typical value for **Belzona 9631** tested as a nine-layer composite will be 100 psi / 7 bar.

### SHELF LIFE

**Belzona 9631** will have a shelf life of 24 months from date of manufacture when stored in the original unopened packaging between 32°F/0°C and 104°F/40°C.

### 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 all its products are carefully manufactured to ensure the highest quality possible and are 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 9631** 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.

### MANUFACTURER / SUPPLIER

Belzona Limited,  
Claro Road, Harrogate,  
HG1 4DS, UK

Belzona Inc.  
14300 NW 60<sup>th</sup> Ave,  
Miami Lakes, FL, 33014, USA

### HEALTH AND SAFETY

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

### 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.

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