

PRODUCT SPECIFICATION SHEET

BELZONA 8111

FN10161



GENERAL INFORMATION

Product Description:

A two part material comprising a reactive fibrous wood powder and reactive liquid. The material has good adhesion to most rigid materials and in particular the material has excellent electrical properties and may be used as an electrical insulator.

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:

- Windows
- Door frames
- Wooden steps
- Ramps
- Trailer bottoms
- Gymnasium floors
- Furniture
- Fiberglass boats
- Fiberglass moldings
- Floors
- Antique carvings
- Historical restorations
- Electrical insulation
- Electrical components

APPLICATION INFORMATION

Working Life

The usable life of material after the commencement of mixing will vary with temperature.

40°F (5°C)	20 minutes
59°F (15°C)	12 minutes
77°F (25°C)	8 minutes

Cure Time

Will be reduced for thicker sections and extended for thinner applications. Allow to solidify for the times shown in the IFU before subjecting it to the conditions indicated.

Volume Capacity

At mixing ratio of 3 parts reactive liquid to 2 parts fibrous wood powder the volume capacity of mixed material is 43.3 in³ (710 cm³) per kg.

Shrinkage

The material has a volumetric shrinkage of approximately 1 - 1.5%.

Powder Component

Appearance	Fine, lump-free powder
Color	Pale cream
Specific Gravity	2.0 - 2.1
Odor	None

Liquid Component

Appearance	Clear to slightly hazy liquid
Color	Amber
Viscosity	4.75 - 7.75 Poise at 77°F (25°C)
Density	1.08 - 1.10 g/cm ³

Mixed Properties

There is no fixed mixing ratio, the fibrous wood powder component may be added in variable quantities to achieve any desired consistency.

A mixing ratio of 3 parts by weight of reactive liquid to 2 parts by weight of fibrous wood powder will produce a smooth paste. This paste will exhibit no slump at ¼ inch (6 mm) thick film.

A mixing ratio of 3 parts by weight of reactive liquid to 1 part by weight of fibrous wood powder will produce a liquid-like consistency ideal for casting any desired shape.

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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ADHESION

When tested to ASTM D1002 typical values will be:

Metal	1,500 psi (10.3 MPa)
Mahogany	1,000 psi (6.9 MPa)
Wood) In general greater than the cohesive strength of the substrate.
Fiberglass	
Asbestos	
Masonry	

CHEMICAL RESISTANCE

The chemical resistance is excellent when compared to conventional wood fillers. For further details contact your local Belzona® Technical Consultant.

COMPRESSIVE STRENGTH

When tested in accordance with ASTM D695, typical values obtained will be 12,000 psi (82.7 MPa).

ELECTRICAL PROPERTIES

Dielectric Strength

Tested to ASTM D149 is typically 10.7 kv/mm.

Dielectric Constant

Tested to ASTM D150 is typically 4.2.

Loss Tangent

Tested to ASTM D150 is typically 0.047.

Volume Resistivity

Tested to ASTM D257 is typically 2.1×10^{14} ohm cm.

Surface Resistivity

Tested to ASTM D257 is typically 8.2×10^{14} ohm.

FLEXURAL STRENGTH

When tested to ASTM D790, typical values obtained will be 3,500 psi (24.1 MPa).

HARDNESS

The hardness of the material when tested to ASTM D2240 is typically 84 Shore D.

HEAT RESISTANCE

Heat Resistance

Thermally stable to 140°F (60°C) wet and 212°F (100°C) dry.

SHELF LIFE

Fibrous wood powder and reactive liquid will have a shelf life of 3 years when stored 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.
ELECTRICORP MARKETING

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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 8111 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

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

Manufactured under an ISO 9000
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