Product Specification Sheet
Belzona 5815
FN10222

General Information

Product Description:
A flexible, two-component, solvent-free barrier coating with chemical resistance to a broad range of chemicals including dilute acids, alkalis, fuels, and oils

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:

- Secondary containment
- Chemical drains and channels
- Acid retaining walls
- Chemical transfer and holding areas
- Cooling tower sections subject to movement

Application Information

Application Methods: Brush, squeegee, spray

Application Temperature: The application should ideally occur from 59 °F to 86 °F (15 °C to 30 °C).

Working Life: The working life will vary according to application temperature. The usable life of mixed material will typically be 90 minutes at 68 °F (20 °C). Consult the Belzona IFU for specific details.

Coverage Rate: Belzona 5815 should be applied in 2 coats to achieve a minimum thickness of 16 mil (400 µm). The theoretical coverage rate of Belzona 5815 is 27 ft^2/L (2.5 m^2/L) at 16 mil (400 µm). Refer to the IFU for practical coverage rate guidelines.

Cure Times:
Cure times will vary depending on the ambient conditions. Consult the Belzona IFU for specific details.

Base Component	
Appearance	Viscous liquid
Color	Gray or khaki
Viscosity at 70 °F (21 °C)	194.0 P
Density	1.30 – 1.40 g/cm^3

Solidifier Component	
Appearance	Clear mobile liquid
Color	Dark brown
Viscosity at 70 °F (21 °C)	12.5 P
Density	1.020 – 1.035 g/cm^3

Mixed Properties	
Mixing Ratio by Weight (Base: Solidifier)	4.1: 1
Mixing Ratio by Volume (Base: Solidifier)	3: 1
Mixed Form	Viscous liquid
Mixed Viscosity at 70 °F (21 °C)	123.4 P
Sag Resistance	> 20 mil (500 µm)
VOC Content (ASTM D2369/EPA Ref.24)	5.66% / 73.6 g/L

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.

Abrasion

Taber
When tested in accordance with ASTM D4060 (1-kg load), the sliding abrasion of samples cured at 72 °F (22 °C) per 1,000 cycles will typically be:

CS17 Wheels (Dry)	37.7mm^3 loss

Adhesion

Pull Off Adhesion
When tested in accordance with ASTM D4541/ ISO 4624, the pull-off strength of samples cured at 72 °F (22 °C) will typically be:

Dry concrete	768 psi (5.3 MPa)*
Damp concrete	566 psi (3.9 MPa)*
Mild steel	2,420 psi (16.7 MPa)

* Cohesive failure of substrate

Chemical Resistance

When fully cured, the material will demonstrate excellent resistance to a broad range of chemicals. For a more detailed description of chemical resistance properties, refer to relevant Chemical Resistance chart.

Compressive Properties

Compressive Strength
When tested in accordance with ASTM D695, the compressive strength of samples cured at 72 °F (22 °C) for 7 days will typically be:

10,178 psi (70.2 MPa)

Compressive Modulus
When tested in accordance with ASTM D695, the compressive modulus of samples cured at 72 °F (22 °C) for 7 days will typically be

9.9 x 10^3 psi (68.2 MPa)

Flexural Properties

Flexural Strength
When tested in accordance with ASTM D790, the flexural strength of samples cured at 72 °F (22 °C) for 7 days will typically be:

312.1 psi (2.2 MPa)

Flexural Modulus
When tested in accordance with ASTM D790, the flexural modulus of samples cured at 72 °F (22 °C) for 7 days will typically be:

3.2 x 10^3 psi (21.9 MPa)

Hardness

Shore D
When tested in accordance with ASTM D2240, the Shore D hardness of samples cured at 72 °F (22 °C) for 7 days will typically be:

70

Heat Resistance

Glass Transition Temperature (T_g)
When tested to ISO 11357-2, T_g of samples cured at 72 °F (22 °C) for 7 days will typically be:

104°F (40°C)

Immersion Resistance
For many typical applications, the material is suitable for continuous immersion in dilute aqueous solutions at temperatures of up to 104 °F (40 °C). Brief temperature excursions of up to 122 °F (50 °C) are acceptable. For further inquiries, please contact Belzona.

Dry Heat Resistance
The indicated degradation temperature in air based on Differential Scanning Calorimetry (DSC) operated in accordance with ISO 11357 is typically 320 °F (160 °C). For many applications, the product is suitable at temperatures down to -40 °F (-40 °C).

Impact Resistance

Falling Weight
When tested in accordance with ASTM D2794, the impact resistance to cracking of samples cured under the conditions stated below will typically be:

52.0 in.lb (0.6 kg.m)	72 °F (22 °C) for 8 days
26.0 in.lb (0.3 kg.m)	86 °F (30 °C) for 8 days

Tensile Properties

When tested in accordance with ASTM D412 (Die C), typical values of samples cured under the conditions stated below will be:

Elongation

25%	cured at 72 °F (22 °C) for 7 days
12%	cured at 72 °F (22 °C) for 40 days

Tensile Strength

2,430 psi (16.8 MPa)	cured at 72 °F (22 °C) for 7 days
3,630 psi (25.0 MPa)	cured at 72 °F (22 °C) for 40 days

When tested in accordance with ASTM D522-Method B (Cylindrical Mandrel Bend), typical elongation values of samples cured under the conditions stated below will be:

Elongation

21%	cured at 72 °F (22 °C) for 7 days
11%	cured at 72 °F (22 °C) for 40 days
13%	cured at 104 °F (40 °C) for 7 days
10%	cured at 104 °F (40 °C) for 40 days

Shelf Life

Separate base and solidifier components shall have a shelf life of five (5) years from date of manufacture when stored in their original unopened containers between 41 °F (5 °C) and 86 °F (30 °C).

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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 (IFU) leaflet.

Belzona further guarantees that all its products are carefully manufactured to ensure the highest quality possible and 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 5815 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/Supplier

Belzona Limited
Claro Road
Harrogate HG1 4DS
United Kingdom

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

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.

Belzona products are manufactured under an ISO 9001 registered Quality Management System.