

# PRODUCT SPECIFICATION SHEET

## BELZONA 7211

FN10192



### GENERAL INFORMATION

#### Product Description

**Belzona 7211** is a three-component, low exothermic, 100% solids, low VOC system for deep pour grout. It exhibits rapid strength development, superior creep resistance, and minimal shrinkage. The consistency of **Belzona 7211** can be optimized for ease of application without compromising performance. Standard and high flow are the two different flowability levels suitable to meet various application conditions.

#### Application Areas

When mixed and applied as detailed in the Belzona Instructions for Use (IFU), the system is ideally suited for deep grouting of large baseplates, soleplates, skids of machinery such as:

- Compressors
- Drums
- Engines
- Vibrating screens
- Generators
- Reducers and drivers
- Pumps
- Fans
- Other machinery

### APPLICATION INFORMATION

#### Application Methods

Casting by pouring

#### Application Temperature

Application should ideally occur in the following ambient temperature range: 50°F (10°C) to 95°F(35°C)

#### Working Life

The working life will vary according to the temperature. At 72°F (22°C), the usable life of mixed material will typically be 45 minutes. Consult the Belzona IFU for specific details.

#### Volume Capacity

**Belzona 7211** should be applied as a deep grouting compound in depths of 2 to 8 in (50.8 to 203 mm).

Unit Coverage	Standard Flow	High Flow*
24.7 kg	682.95 in <sup>3</sup> (11,191.54 cm <sup>3</sup> )	597.49 in <sup>3</sup> (9,791.11 cm <sup>3</sup> )
124 kg	3,428.60 in <sup>3</sup> (56,184.69 cm <sup>3</sup> )	2,999.56 in <sup>3</sup> (49,153.98 cm <sup>3</sup> )

\*Reduction of 1/5 of the Aggregate.

#### Cure Time

Allow to cure for the times shown in the Belzona IFU before subjecting it to the conditions indicated.

#### Mixed Properties

Color	Brown
Peak exotherm (1 lb or 454 g):	86 - 95°F (30 - 35°C)
Density	
Standard Flow	2.20 g/cm <sup>3</sup>
High Flow	2.10 g/cm <sup>3</sup>
Mixing Ratio by Weight (Base : Solidifier : Aggregate)	
Standard Flow	4.6 : 1 : 41
High Flow	4.6 : 1 : 33

*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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### FLOW TIMES AND BEARING AREA

The flow times and bearing areas with 2 in (50.8 mm) clearance, when determined in accordance with ASTM C1339, will typically be:

Flow times	Standard Flow	High Flow
End of box	11 min.	9 min.
Full plate contact	15 min.	13 min.

  

Bearing area	Standard Flow	High Flow
	≥ 95%	≥ 95%

### COMPRESSIVE PROPERTIES

#### Compressive Yield Strength

When determined in accordance with ASTM D695, typical values will be:

Standard Flow	High Flow	Cure
13,100 psi (90 MPa)	12,000 psi (83 MPa)	24 hrs at 72°F (22°C)
14,800 psi (102 MPa)	13,300 psi (92 MPa)	72 hrs at 72°F (22°C)
15,200 psi (105 MPa)	14,400 psi (99 MPa)	7 days at 72°F (22°C)
15,200 psi (105 MPa)	15,300 psi (105 MPa)	28 days at 72°F (22°C)

#### Compressive Modulus

Standard Flow	High Flow	Cure
6.6 x 10 <sup>5</sup> psi (4,550 MPa)	6.8 x 10 <sup>5</sup> psi (4,688 MPa)	72 hrs at 72°F (22°C)

### TENSILE PROPERTIES

When determined in accordance with ASTM D638, typical values will be:

Standard Flow	High Flow	Cure
2,800 psi (19 MPa)	2,200 psi (15 MPa)	72 hrs at 72°F (22°C)

### FLEXURAL PROPERTIES

When determined in accordance with ASTM D790, typical values will be:

Standard Flow	High Flow	Cure
5,800 psi (40 MPa)	5,800 psi (40 MPa)	72 hrs at 72°F (22°C)

### ADHESION

#### Pull Off Adhesion

The PosiTest dolly pull off strength, as determined in accordance with ASTM 4541, will typically be:

	Standard Flow	High Flow
Mild steel	2,500 psi (17.2 MPa)	2,500 psi (17.2 MPa)
Concrete*	610 psi (4.2 MPa)	650 psi (4.5 MPa)

\*Cohesive failure of substrate

### CREEP PROPERTIES

#### Creep Resistance

When determined in accordance with ASTM C1181, typical values will be:

Standard Flow	High Flow	Test
6.2 x 10 <sup>-3</sup> in/in (cm/cm)	8.7 x 10 <sup>-3</sup> in/in (cm/cm)	at 600 psi (4 MPa), 150°F (65.5°C)

### IMPACT RESISTANCE

The Izod impact strength (notched) of when determined in accordance with ASTM D256, will typically be:

Standard Flow	High Flow	Cure
1.2 ft-lb/in <sup>2</sup> (2.5 KJ/m <sup>2</sup> )	1.2 ft-lb/in <sup>2</sup> (2.5 KJ/m <sup>2</sup> )	72 hrs at 72°F (22°C)

### HEAT RESISTANCE

When determined in accordance with ASTM D648, typical values will be:

#### Heat Distortion Temperature

Standard Flow	High Flow	Cure
136°F (58°C)	136°F (58°C)	72 hrs at 72°F (22°C)

#### Maximum Continuous Service Temperature (for non-load bearing applications)

Standard Flow	High Flow	Cure
250°F (121°C)	250°F (121°C)	72 hrs at 72°F (22°C)

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### CHEMICAL RESISTANCE

**Belzona 7211** is resistant to a broad range of chemicals including: Alkalis, hydrocarbons, detergent solutions, mineral and lubricating oils, salts and many other commonly found chemicals.

### FIRE RESISTANCE

When determined in accordance with ASTM D635:

Self-Extinguishing

### HARDNESS

#### Shore D

When determined in accordance with ASTM D2240 will typically be:

Standard Flow	High Flow	Cure
91	91	72 hrs at 72°F (22°C)

### SHELF LIFE

Separate base and solidifier components shall have a shelf life of 3 years from date of manufacture when stored in their original unopened containers between 32°F (0°C) and 86°F (30°C).

### 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 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 7211** 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

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

### HEALTH AND SAFETY

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

### 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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