# PRODUCT SPECIFICATION SHEET BELZONA 4521

BELZONA®
Repair • Protect • Improve

FN10089

# **GENERAL INFORMATION**

#### **Product Description:**

A two-component, solvent free, fluid elastomeric sealant for horizontal building and expansion joints. Once combined, the base and solidifier form a flexible, elastomeric compound with low modulus.

#### **Application Areas:**

This material is designed for sealing building and expansion joints with ±25% movement.

# APPLICATION INFORMATION

### Working Life

The usable life will vary according to temperature. At  $77^{\circ}F$  (25°C), use all mixed material within 150 minutes.

#### Cure Time

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

#### **Volume Capacity**

98.4 cu.in. (1612 cm<sup>3</sup>) per 2 kg unit.

## **Base Component**

Appearance Viscous grey liquid Density 1.30 g/cm³

## **Solidifier Component**

Appearance Clear yellow liquid Density 1.03 g/cm³

#### Mixing Ratio

Mixing Ratio by Weight (Base : Solidifier) 4 : 1
Mixing Ratio by Volume (Base : Solidifier) 3.2 : 1

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

The 90° peel adhesion using Belzona\* 4911 (TX Conditioner) and tested in accordance with ASTM D429 (modified) is typically:

# Substrate Adhesion

 Blasted steel
 26 pli (460 kg/m)\*

 Aluminum
 28 pli (495 kg/m)\*

 Concrete
 26 pli (460 kg/m)\*

 Belzona\* 4111
 24 pli (424 kg/m)\*

\* Cohesive failure in Belzona 4521

# CHEMICAL RESISTANCE

Once fully cured, the material will demonstrate good resistance to a broad range of chemicals.

# **ELONGATION & TENSILE PROPERTIES**

## **Elongation**

Tested in accordance with ASTM D412 (Die C) is typically 550%.

### **Tensile Strength**

Tested in accordance with ASTM D412 (Die C) is typically in range 450-540 psi  $(31.6-38.0 \text{ kg/cm}^2)$ .

# **EXPANSION JOINT APPLICATIONS**

Material is tested against a modified ASTM C-719 "Adhesion and Cohesion of Elastomeric Joint Sealant" and qualified as a Type M Class 25 (±25% movement) sealant.

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# **HARDNESS**

#### Shore A

Tested in accordance with ASTM D2240 is typically 45.

#### **TEAR STRENGTH**

#### **Tear Strength**

Tested in accordance with ASTM D624 is typically 72 pli (1285 kg/m).

# SHELF LIFE

Separate base and solidifier components shall have a shelf life of 5 years from date of manufacture when stored in their original unopened containers between 32°F (0°C) and 86°F (30°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 that all its products are carefully manufactured to ensure the highest quality possible and are 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 4521** 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.

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