PRODUCT SPECIFICATION SHEET
BELZONA 5231
FN10096

BELZONA®
Repair • Protect • Improve

GENERAL INFORMATION

Product Description:
A two component coating system, incorporating a non-slip aggregate. This high build solvent free coating is suitable for application to a range of rigid substrates, including concrete, steel, etc.
Available in a range of colours, including dark grey, light grey, and yellow.

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:

- Food preparation
- Warehousing
- Showrooms
- Corridors
- Decks
- Chemical storage
- Canteens
- Schools
- Offices, etc.

APPLICATION INFORMATION

Coverage Rate
As a guide, at a thickness of 300 microns (12 mils) (WFT), the theoretical coverage rate will be 3.33m² (36ft²) per litre or 13.33m² (144ft²) per 4 litre unit.

Application to rough, pitted or irregular surfaces may reduce these coverage rates by 20 - 25%.

Cure Time
Allow to solidify for the times shown on the Belzona IFU before subjecting it to the conditions indicated.

Note: Below 41°F (5°C), solidification times will be significantly extended and the resultant properties of the **Belzona 5231** will be reduced.

Slip resistance can be improved by incorporating additional aggregate. Refer to Belzona TKL for additional information.

Base Component

Appearance	Gritty soft paste
Density	1.72-1.79 g/cm³

Solidifier Component

Appearance	Slightly hazy amber liquid
Density	1.09 g/cm³

Mixed Tests

Mixing ratio by Volume (Base : Solidifier)	3 : 1
Density	1.56-1.61 g/cm³
Sag Resistance	4 mils (100 microns)
Time to Peak Exotherm at 68°F (20°C)	50 minutes
Peak Exotherm Temperature	214°F (101°C)
Useable Life at 68°F (20°C)	30 minutes

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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ABRASION

Taber
The Taber abrasion resistance using CS17 wheels dry and 1kg load is typically:

21mm^3 loss of coating per 1000 cycles.

ADHESION

Tensile Shear
When tested in accordance with ASTM D1002, typical adhesion values obtained on grit blasted steel will be:

2040 psi (14.06 MPa)

Tensile
Pull off adhesion tested to ASTM D4541:

Dry concrete	1050 psi (7.24 MPa)*
Damp concrete	770 psi (5.31 MPa)*
Blasted steel	3270 psi (22.55 MPa)**
Ground steel	3510 psi (24.20 MPa)**
Dry brick	1250 psi (8.62 MPa)*
Damp brick	1175 psi (8.10 MPa)*
Dry quarry tile	2580 psi (17.78 MPa)*
Damp quarry tile	1710 psi (11.79 MPa)*

* *Cohesive failure in substrate*
** *Cohesive failure within **Belzona 5231***

CHEMICAL RESISTANCE

Belzona 5231 is resistant to a broad range of chemicals including: alkalis, hydrocarbons, detergent solutions, mineral and lubricating oils, salts and many other commonly found chemicals.

* *For a more detailed description of chemical resistance properties, refer to relevant Chemical Resistance chart.*

HARDNESS

Shore D & Barcol Hardness
The Shore D and Barcol hardness, when determined in accordance with ASTM D2240 and ASTM D2583, will typically be:

	Ambient cure (68°F/20°C)
Shore D	78
Barcol 934-1	28
Barcol 935	97

Koenig Pendulum
When tested to ISO 1522 the Koenig damping time of the ambient cured coating is typically: 87 seconds.

HEAT RESISTANCE

Heat Distortion Temperature
The heat distortion temperature (HDT) of the material has been tested in accordance with ASTM D648, under 264 psi fibre stress. Typical results obtained using different cure schedules are as follows:

Cure Schedule	**HDT Values**
68°F (20°C) cure	90°F (32°C)
212°F (100°C) cure	113°F (45°C)

Dry Heat Resistance
The indicated degradation temperature in air based on Differential Scanning Calorimetry (DSC) operated in accordance with ISO11357 is typically 284°F (140°C).
For many applications the product is suitable down to -40°F (-40°C).

SLIP RESISTANCE

When tested in accordance with BS 7976 utilizing RAPRA Slider 96, the **Belzona 5231** was classified as having "Low Slip Potential" under both dry and water wet conditions, based on the currently accepted limits from the UK Slip Resistance Group.

The results obtained were:

	As supplied	**+ 20% Belzona 9231 Aggregate**
Mean PTV Wet	49	61
Mean PTV Dry	65	69
Surface roughness Rz	16.7	28.6

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 41°F (5°C) and 86°F (30°C).

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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 5231 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 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.

Belzona products are manufactured under an ISO 9001 Registered Quality Management System