BELZONA 3121 Product Specification Sheet

1. PRODUCT NAME

Belzona® 3121 (MR7)
The emergency repair and weatherproofing system for sealing all types of roof surfaces against atmospheric attack even during adverse weather conditions. Designed for instant waterproofing at all times of the year.

2. MANUFACTURER

Belzona Inc.,
2000 N.W. 88th Court
Miami, Florida 33172

Belzona Polymerics Ltd.,
Claro Road, Harrogate,
HG1 4DS, England

3. PRODUCT DESCRIPTION

A two-component material consisting of a base and solidifier which are individually stable but react on mixing to produce a tough elastomeric compound. The interpenetrating polymer network has excellent weathering resistance and adhesion. A synthetic reinforcing sheet is used to bridge all roof contours and control film thickness. The totally seamless system will resist foot traffic.

Applications
Roofs
Gutters
Parapet walls
Glazing bars
Joints
Seams
Flashings

4. TECHNICAL DATA

Base Component	
Appearance	Thixotropic liquid
Color	Off white
Density	1.15 - 1.19 g/cm³
Viscosity	11 - 17 poise at 77°F (25°C)

Solidifier Component	
Appearance	Mobile liquid
Color	Black
Density	1.51 - 1.57 g/cm³
Viscosity	0.5 - 1.5 poise at 77°F (25°C)

Mixing Ratio	
Mixing Ratio by Weight (Base : Solidifier)	2.7 : 1
Mixing Ratio by Volume (Base : Solidifier)	3.5 : 1

Belzona® 9331
(MR7 Reinforcing Sheet)

Material type	Spun bonded 100% polypropylene
Finish	Untreated
Width	17.0 - 17.5 cm or 44.0 - 44.5 cm
Weight	38 - 42 g/m²

• ***Shelf Life:***
Separate base and solidifier components shall have a shelf life of at 5 years when stored between 32°F (0°C) and 86°F (30°C).

• ***Working Life:***
Will vary according to temperature. At 77°F (25°C) the usable life of mixed material is typically 12 minutes.

• ***Coverage Rate:***
The theoretical coverage rate for a single layer is 21 sq.ft. (2.0 sq.m.) per liter when applied at a dry film thickness of 15 mils on a smooth surface. A two-coat system will cover 10 sq.ft. (1.0 sq.m.) per liter. The practical coverage rate is dependent on the nature of the substrate.

Substrate	Coverage Rate per Liter
Glass	21.0 sq.ft. (2.0 sq.m.)
Mineral felt	12.5 sq.ft. (1.2 sq.m.)
Smooth felt	20.0 sq.ft. (1.9 sq.m.)
Asphalt	20.0 sq.ft. (1.9 sq.m.)
Smooth concrete	17.5 sq.ft. (1.7 sq.m.)
Rough concrete	12.5 sq.ft. (1.2 sq.m.)

• ***Cure Time:***
The system is water resistant immediately after application. The time taken for it to develop ultimate adhesive and mechanical properties is indicated below:

Temperature	Time
32°F (0°C)	30 days
50°F (10°C)	15 days
68°F (20°C)	7 days
77°F (25°C)	5 days
86°F (30°C)	3 days

5. PHYSICAL/MECHANICAL PROPERTIES

Determined after 7 days cure at 77°F (25°C).

• ***Chemical Resistance:***
Provides outstanding environmental resistance against aggressive industrial, marine or high humidity conditions.

• ***Elongation:***
When tested to ASTM D412 (Die C) is typically 630%.

After 3,000 hours accelerated weathering (roughly equivalent to 6 years natural exposure), elongation at break (ASTM D412) is 480%.

• ***Flexibility:***
Maintains flexibility down to -11°F (-24°C) in accordance with MOAT No. 27 : 1983 Test 5.4.2. (20 mm mandrel bend test).

• ***Hardness:***
35 Shore A after 24 hours cure at 77°F (25°C).

• ***Sag Resistance:***
15 mils (375 microns) minimum.

• ***Tear Strength:***
When tested to ASTM D624 (Die C) is typically 160 pli (2856 kg.m).

• ***Tensile Strength:***
When tested to ASTM D412 (Die C) is typically 780 psi (54.8 kgs/cm²).

After 3,000 hours accelerated weathering (roughly equivalent to 6 years natural exposure), 450 psi (31.6 kgs/cm²).

• ***Water Vapor Permeability:***
When tested to ASTM D1653 water vapor permeability is typically: 2.9 mgm/cm²/mm/24 hrs.

6. SURFACE PREPARATION AND APPLICATION PROCEDURES

For proper technique, refer to the Belzona® Instructions For Use Leaflet which is enclosed with each packaged product.

7. AVAILABILITY AND COST

Belzona® 3121 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.

8. WARRANTY

Belzona® guarantees this product will meet the performance claims stated herein when material is stored and used as instructed in the Instructions 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, etc.). Since Belzona® has no control over the use of the product described herein, no warranty for any application can be given.

9. TECHNICAL SERVICES

Complete technical assistance is available and includes fully trained Technical Consultants, technical service personnel and fully staffed research, development and quality control laboratories.

10. HEALTH AND SAFETY

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

11. APPROVALS/ ACCEPTANCES

U.S.D.A.
GENERAL MOTORS
FORD
LEAD SHEET ASSOCIATION
NUCLEAR POWER INDUSTRY
(DBA Tested)

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

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Repair • Protect • Improve