BELZONA® World leaders in the conservation of man-made resources and the environment

PRODUCT SPECIFICATION SHEET
BELZONA® 5851

1. PRODUCT NAME
Belzona® 5851
(HA-Barrier)
Heat activated corrosion resistant coating.

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

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

3. PRODUCT DESCRIPTION
A single component coating based on a heat activated resin and corrosion resistant inert fillers. When cured, the material is durable and corrosion resistant.

Designed to be applied to hot surfaces 158 - 302°F (70 - 150°C), such as under-insulation metalwork. Tolerant of surface preparation.

4. TECHNICAL DATA

Appearance	Paste
Color	Gray
Gel strength at 68°F (20°C)	100 HF g/cm
Density	2.0 g/cm^3

• *Shelf Life:*
Belzona® 5851 will have a shelf life of at least 18 months when stored at 68°F (20°C). Refridgeration of this product will extend the shelf life.

• *Working Life:*
Cure will not commence until the product is heated, hence the working life of **Belzona® 5851** is effectively unlimited.

• *Volume Capacity:*
The volume capacity of 1 kg. of **Belzona® 5851** is 25.2 in.^{3} (513 cm^3).

• *Cure Time:*
The cure time of **Belzona® 5851** is primarily dependent on the heat-cure temperature - see table below. The minimum recommended cure temperature for **Belzona® 5851** is 158°F (70°C).

• *Coverage Rate:*
Applied at a thickness of 8 mil (200 microns) a theoretical coverage rate of 27 sq.ft. (2.5 m^2) per kg, per coat, should be achieved.

5. PHYSICAL/MECHANICAL PROPERTIES

• *Tensile Shear Adhesion:*
When tested in accordance with ASTM D1002, at elevated temperature (212°F/ 100°C), typical values will be:

2800 psi (197 kgs/cm^2) after cure at 212°F (100°C) applied onto clean, ground steel.

2800 psi (197 kgs/cm^2) after cure at 212°F (100°C) onto grit-blasted steel (min 75µ profile).

1700 psi (120 kgs/cm^2) after cure at 212°F (100°C) applied onto rusty steel prepared to ISO 8501-1 St 2 (wire brushed)

2600 psi (183 kgs/cm^2) after cure at 212°F (100°C) applied onto rusty steel prepared to ISO 8501-1 St 3 (manually abraded)

• *Chemical Resistance:*
Once fully cured, the material will demonstrate excellent resistance to most commonly found inorganic acids and alkalis at concentrations up to 20%. The material is also resistant to hydrocarbons, mineral oils, lubricating oils and many other commonly found chemicals.

• *Corrosion Resistance:*
Will show no visible signs of corrosion after 1,000 hours exposure in the ASTM B117 salt spray cabinet.

• *Heat Distortion Temperature:*
Tested to ASTM D648 (264 psi fiber stress), typical value obtained will be:
260°F (127°C) after 7 days cure at 212°F (100°C)

• *Heat Resistance:*
For many typical applications, the product is thermally stable up to 302°F (150°C).

CURE TIMES

TEMPERATURE	158°F (70°C)	176°F (80°C)	194°F (90°C)	212°F (100°C)	248°F (120°C)	302°F (150°C)
Light loading	24 hrs	16 hrs	4 hrs	2 hrs	30 min	10 min
Full cure	7 days	5 days	3 days	2 days	1 day	16 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® 5851 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 Belzona® 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 recognised 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.

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BS EN ISO 9002 : 1994
Certificate No. Q/09335

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Printed in England 6/02 UK