

Polyester AntiBac Range

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Product Description

Designed where the user requires an anti-bacterial coating coupled with a superior exterior-durable finish. In addition, the product offers excellent flow, toughness and good chemical resistance. Powder coatings containing the active ingredient have been challenged with various microbes, including MRSA (Multiple-Resistant Staphylococcus Aureus). Results have shown the product to offer superb antibacterial properties.

The product is therefore eminently suited as a failsafe in the control of microbes in the treatment of 'sick-building syndrome', in cleanroom applications, such as operating theatres and laboratories and in any other application where the end-user requires sanitary conditions. It does not replace normal cleaning regimes.

Despite the excellent anti-microbial properties, the product is non-toxic.

A range of substrates may be coated. For further details contact your local HMG representative.

Powder Properties

Gloss (ISO 2813)

Gloss	85% ± 10
Semi-gloss	60% ± 7
Matt	30% ± 5

Any gloss level as specified.

Specific Gravity

1.40 – 1.70 g/cm³ depending on colour.

Coverage

From 10 – 14 m²/kg at 60 microns film thickness.

Curing Schedule

See box label for curing conditions, the following is typical for the range:

10 minutes at 180 Celsius object temperature

Colours

Any submitted colour standard can be manufactured to customer's requirements.

Biocidal Data

Example 1: System challenged with MRSA:

Time	Polyester Anti-Bac
% reduction vs control	99.98%
% reduction vs initial inoculum	99.994%

Table 1 (Counts per plate)

Example 2: System challenged with E-Coli:

Time	Polyester Anti-Bac
% reduction vs control	99.9999%
% reduction vs initial inoculum	99.996%

Table 2 (Counts per plate)

Contact your local HMG representative for specific test data.

Where a specific test is required, this can be arranged.

Mechanical Properties

All tests carried out on degreased zinc-phosphated steel coated with a white to 70µm and cured at 10 minutes @ 180°C object temperature.

The products offer:

- An anti-microbial surface
- Good resistance to corrosion
- Good resistance against chemicals
- Excellent adhesion
- High surface hardness

Hardness (ISO 2815) Buchholz Indentation Test
>80

Flexibility-Bend Test (ISO 1519)

(BS 3900: Part E1: 1970)

>5 mm (3/16 inch) diameter Mandrel

Adhesion (ISO 2409)

Cross hatch (BS 3900: Part E6: 1974)

Classification Gt 0

Cupping Test (ISO 1520)

(BS 3900: Part E4: 1976)

>5 mm

Impact Test – Falling Weight (ECCA T5)

(BS 3900: Part E7: 1974)

>25 kg cm (N)

Corrosion Resistance

Neutral Salt Spray (ASTM B117)

More than 500 hours with creepage of corrosion less than 2mm from scribe mark.

Resistance to Mortar (ASTM C 207)

Easy to remove. No staining

Kersternich Test (ISO 3231)

DIN 50018 KFW2.05

More than 10 cycles with creepage less than 2mm from scribe mark.

Humidity (DIN 50017, BS 3900: Part F2: 1973)

More than 1000 hours without any effect.

Boiling Water Resistance

After 2 hours boiling water, or 1 hour pressure cooker: no defects or detachment

Storage Stability

When stored in cool (<25°C), dry conditions – 12 months.

Health and Safety

Consult the health and safety data sheet indicated on the label.

This information relates only to specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of HMG Powder Coatings Ltd.'s knowledge and belief, accurate and reliable as of the date indicated. However, no representation, warranty or guarantee is made as to its accuracy or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.

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