

## YY-XXX-A017 SERIES

(DS XXXF)

Antimicrobial powder coatings



*Information:*

1. *Product features*
2. *Technical information*
3. *Variants and special formulations*
4. *Sublimation*
5. *Possible usage and applications*



Marchi di qualità registrati di **Decoral System®**



### DECORAL SYSTEM SRL

Viale del Lavoro, 5 - Arcole 37040 (Verona) ITALY - Tel. +39 045 7639111 - Fax +39 045 7639100  
Email: [info@decoral-system.com](mailto:info@decoral-system.com) - Website: [www.decoral-system.com](http://www.decoral-system.com)

# TECHNICAL TOOLS

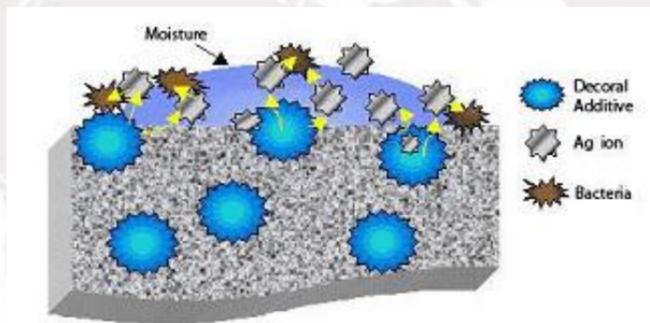
Laboratory Tests and Technical Documentation

**1. Product features**

The powder coatings of the YY-XXX-A017 series (previous code: DS XXXF) are characterized by additives that make the surface of these coatings resistant to microbial growth; while on a normal surface microbes and bacteria can easily settle and proliferate, on objects and surfaces coated with YY-XXX-A017 powders the bacterial growth is neutralized thanks to its special formulation.

These products have been tested by an independent laboratory in Japan, which has certified the antimicrobial efficacy against the two main kinds of bacteria (*Escherichia coli* and *Staphylococcus aureus*).

Besides, *Accelerated Weathering Tests* (AWT) have been carried out on these powders, simulating a ten-years period of exposure: the anti-microbial activity has proved to fully retain its efficiency, with a 100% microbial resistance at the end of the test.



**2. Technical information**

- Technical data

Powder type	Polyurethane
Class resistance	Class 1 (suitable for outdoor use)
Yield (in surface/mass)	13,1 m <sup>2</sup> /Kg
Specific weight	1,27 ± 0,03 g/cm <sup>3</sup>

- Application and curing cycle

Available for corona charging.

Curing time and temperature: 25 minutes at 195°C – 383°F (metal temperature).

Reccomended thickness: 60 microns – yield 13.1 m<sup>2</sup>/Kg,  
 70 microns – yield 11.2 m<sup>2</sup>/Kg,  
 80 microns – yield 9.8 m<sup>2</sup>/Kg.

- Mechanical proprieties

Test	Standard reference	Result
Buchholz	ISO 2815	ok
Adhesion	ISO 2409	No loss of adhesion; ok
Bending	ISO 1519	No loss of adhesion; ok
Salt spray	ISO 9227	corrosion <4 mm; ok

**3. Variants and special formulations**

On customer's request, the following formulations are available:

- Matt, glossy, or textured;
- Class 2;
- Polyester,
- Low-cure.

**4. Sublimation**

The powders of the antimicrobial series are suitable for the decoration with heat-transfer technology, to match the functionality of this special product with the aesthetic value of a wood effect or a decorative motif.



DS 406F

DS 406F + 2903/05

**5. Possible usage**

This series has its perfect application in environments where cleanliness and hygiene are most important: hospitals, kindergartens and canteens are just some of the many possible places that this product would finely suit.

