

P.23 series antibacterial polyester Colore®

The Information given in this data sheet are generic for Colore® P.23 series. For further detail concerning specific products belonging to P.23 series, please contact us.

Description

Colore® P.23 is a powder coating series, formulated with polyester resins added with long term antibacterial's effect silver ions. It is heavy metals and TGIC free. Film obtained after product's polymerization owns good mechanical features, a good flow and valid resistant features to weathering and chemical agents (detergents, propellants, lubricants...)

Area of applicability

Products developed in P.23 series can be used for painting and protecting metallic substrates for outdoor using: air conditioners, refrigerating appliances etc.

Colour / Aspect

Please check stock list for eventual availability. Minimum order for custom production, starting from 25 kgs.

Products developed in P.23 could be:

- Smooth – glossy 80-95 gloss*
- Smooth – semi glossy 51-79 gloss*
- Smooth – semi matt 31-50 gloss*
- Smooth – matt 20-30 gloss*
- Smooth – metallic

Gloss level taken at 60° angle of incidence

Legislation

This powder coating respects European Directives "Restriction of the use of certain hazardous substances" 2002/95/CE and 2011/65/EU (RoHS).

Storage stability and packaging

if kept in dry environment, in sun shelter and at temperature of maximum less than 30° powder coating stays stable for 6 months. In presence of different conditions then the ones written above, it is possible to accuse inconveniences such as lumps and important decreasing in powder coating fluency.

Goods are supplied in 25 or 20 kgs plastic bags and cardboard boxes.



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Physical features

- Specific gravity: 1.50-1.65 g/cm³ according to the product
- Theoretical spreading rate: m²/kg = 1000/specific weight for thickness
- Particle size at 63 μ: range 18-26

Antibacterial efficacy test**	
Candida Albicans	ATCC 10231
Escherichia coli	ATCC 8739
Listeria Monocytogenes	ATCC 15313
Pseudomonas Areuginosa	ATCC 15442
Salmonella Enteritidis	ATCC 13076
Staphylococcus Aureus (MRSA)	ATCC 6538P
Enterococcus faecalis (VRE)	DSM 13591
Staphylococcus Aureus (MRSA)	ATCC 33592

** Tests carried out in accordance with ISO 22196/2011 which corresponds to the Japanese industrial standard JIS Z 2801. These bacteria represent possible pathogens that can induce infections. Test results demonstrate the high and effective antibacterial action of the P.23 series.

Use biocides with precaution. The specific information provided here is the result of our scrupulous tests, but this does not exonerate to carry out your specific tests and trials.



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Features P.23 series after polymerization			
	Test conditions		
Steel panel	0,8 mm		
Surface pretreatment	Zinc salt phosphating		
Film thickness	According to the effect		
Curing conditions	180°x15' (T° object)		
TESTS	SPECIFICATIONS	UNITA' DI MISURA	RISULTATI
Gloss (60°)	UNI EN ISO 2813	gloss	Up to the effect
Thickness	UNI EN ISO 2360	μ	range 80-120
Colour gap (Δe) compared to initial standard		CIEILab	According to Qualicoat specifications
Buchholz hardness	UNI EN ISO 2815		Variable, according to the finishing (minimum value 80)
Erichsen cupping test	UNI EN ISO 1520	mm	<5 mm no cracks
Impact test (concave)	UNI EN ISO 6272-2	cm/kg	range 40-60 cm/kg no cracks
Impact test (convex)	UNI EN ISO 6272-2	cm/kg	range 50-70 cm/kg no cracks
Bend test (Cylindrical mandrel)	UNI EN ISO 6860	mm	5mm No cracks
Cross-cut adhesion test	UNI EN ISO 2409	GT	0: no detachment
Salt spray test 250 h	MTD-03	mm	Penetratiron <2 mm

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Surface preparation

Surface must be carefully cleaned and degreased, according to the corrosion protection level requested. On steel, in order to get better results and to improve corrosion resistance features, it is possible and suggested, the use in combination with our Colore® epoxy primers.

Application

- Spraying can be done with automatic or manual Corona or Tribo electric system. With tribo electric system, compatibility with any metallic powder coating must be tested in plant, before its industrial use.
- Never mix powder from different production batches.

Polymerization conditions

(object temperature)

As prescribed for any specific product

Safety

Please check safety data sheet of specific product (MSDS)

Disclaimer: all provided and given information are correct and the result of our best experiences and knowledges, but they do not comport any responsibilities or warranty in case of non-proper use. In accordance with COLORE® policy of products development, information given in this technical data sheet are susceptible, without notice, of changing in respect of company view product's continuous improvement.

Colore® - powder coatings

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This technical data sheet replaces all previous versions

