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 - Website: www.decoral-system.com

TECHNICAL TOOLS

Laboratory Tests and Technical Documentation

MRK-012-0057rev1

Decoral System®

ULTRA LOW-CURE SERIES

3C-XXX-A019 – smooth version
3G-XXX-A019 – textured version

Ultra Low-Cure powder-coatings

Information:

1. *Product features*
2. *Technical information*
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5. *Possible usage and applications*

ULTRA LOW-CURE SERIES

Ultra Low-Cure powder-coatings

1. Product features

The products of the *Ultra Low-Cure* series are completely cured at temperatures/times remarkably lower and shorter than standard powder-coatings.

Treatment for standard powders: 20 minutes at 200°C.
Treatment for the Ultra Low-Cure series: 20 minutes at 150°C.

This series can be a convenient solution in terms of energy and time saving, especially in the coating of objects with high heat capacity, that would hardly reach the temperatures required by standard powder-coatings for a correct curing.

Ultra Low-Cure powders, besides, provide a fine solution for the coating and decoration of heat sensitive materials, i.e. materials that could not resist the high temperatures of standard curing conditions, with the risk of melting or decomposing.

This product is codified as follows (XXX stands for the three digits of the color):
- 3*C*-XXX-A019: smooth version
- 3*C*-XXX-*A039*: smooth version, packaging for *U.S.A. shipping*
- 3*G*-XXX-A019: textured version
- 3*G*-XXX-*A039*: textured version, packaging for *U.S.A. shipping*

2. Technical information

- Technical data

Powder type	Polyester
Class resistance	Not for outdoor use
Yield (in surface/mass)	13,8 m^2/Kg
Specific weight	1,20 ± 0,03 g/cm^3

- Application and curing cycle

Available for corona charging.
Curing time and temperature: 20 minutes at 150°C – 302°F (metal temperature).
Recommended thickness: 60 microns – yield 13,8 m^2/Kg,
70 microns – yield 11,9 m^2/Kg,
80 microns – yield 10,4 m^2/Kg.

- Mechanical properties

Test	*Standard reference*	*Result*
Buchholz hardness	ISO 2815	ok
Cross-cut	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

Several variants for this series are available. It is possible to produce it:

- Glossy, matt, or textured;

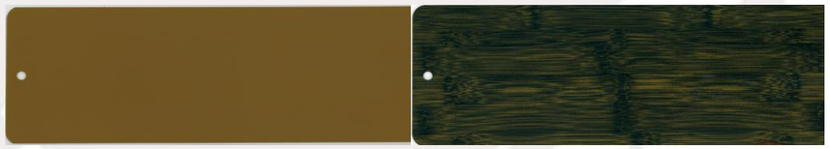
- Antimicrobial;

-Metallized, and bonded metallized;

- Matching RAL references.

4. Sublimation

With heat-transfer technology it is possible to obtain wood effects, fancy effects and every kind of decoration; the versatility of this series is the same as any other kind of sublimable powder coating.
We recommend to check the compatibility of the sublimation process (time and temperatures) with the mechanical and thermal resistance of the material to be decorated.



3C-903-A019 3C-903-A019 + 2902/08

5. Possible usage

The powders of this series are all suitable for the usual applications of normal sublimable powder coatings. We recommend to always check whether a certain finish is suitable or not for outdoor use.
A perfect application for these products is in the coating of heat-sensitive materials that couldn't be coated with standard powders.
Heat-transfer decoration is to be carried out with IR technology.
This series then expands the range of materials that can be powder-coated and decorated by sublimation.
Besides, these products can represent a significant saving in terms of energy and time, when coating objects with a high heat capacity.