

## **ICETOUCH-XXX**

Special textured effect powders



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## 1. Product features

The main feature of the *Icetouch* powders is their unique rough surface: special additives afford both a peculiar roughness and a shine that differ definitely from typical textured powder coatings.

All these products are suitable to decoration with heat-transfer technology.



Picture 1: Icetouch-022 (left), Icetouch-007 (in the middle), Icetouch-023 decorated with heat-transfer film 75007/07M (right).

## 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: 20 minutes at 200°C – 392°F (metal temperature).

Recommened 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 properties

<b>Test</b>	<b>Standard reference</b>	<b>Result</b>
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

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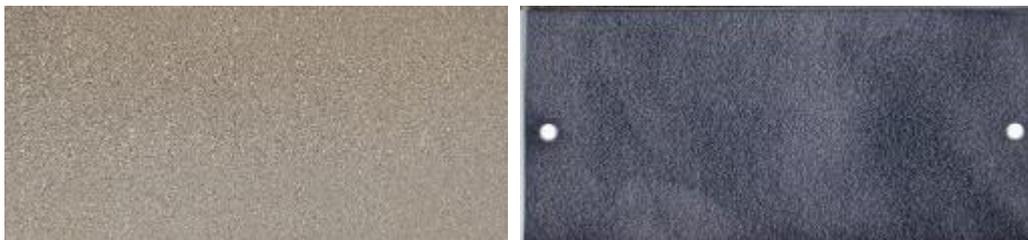
## 3. Variants and special formulations

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

- Antimicrobial;
- Matching RAL references;
- In metallic colors.

## 4. Metallic color formulation: *Metaltouch*

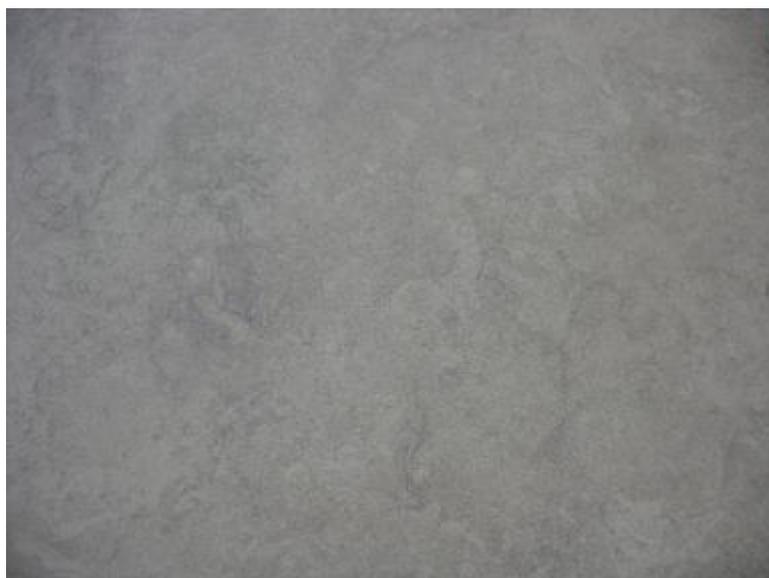
*Metaltouch* powders are a special variant of this series: by adding a metal-looking shade to the colors of these products, we obtain a new effect, unique under every point of view.



**Picture 2:** On the left, Icetouch-013; on the right, Icetouch-013 decorated with heat-transfer film 5007/01.

## 5. Possible usage

The *Icetouch* powders may finely suit those applications where their very special textured surface can be closely appreciated and touched. However, they can also be properly valorized in those applications where their unique brightness alone would result in an add value.



**Picture 3:** Icetouch-013 decorated with heat-transfer film 5024/01.

## 6. Laboratory test

### - Hiding test

Hiding test allows the assessment of the ability of a powder to show the surface of the material on which is deposited: lower is the hiding power, higher is the thickness of powder coating that must be applied to hiding the surface below.

For this purpose, the test is done by painting with an Icetouch powder a sample panel, which has a black area and a white area; higher is hiding power, lower is the difference between the two parts of painted sample panel. In the following picture there are two example of test; it results that hiding power of Icetouch powders is not high, so it is even more important a perfect pretreatment of surface of which the powder is then used to obtain a homogeneous final effect.



**Picture 4:** On the left, hiding test with Icetouch-007; on the right, hiding test which Icetouch-013.

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## - Natural weathering test

The Florida natural weathering test is a mandatory test, required by all international specifications, critical to evaluate the resistance of coating powders for external use. This test is based on International Standard ISO 2810:2004; the sample panel shall be exposed facing 5° south for 12 months. Decoral exposes its sample panels also for 24, 36 or 60 months to evaluate them in extreme conditions. On their return, the panels are evaluated for color change ( $\Delta E$ ) and gloss remaining percentage.

In the following picture there is a sample Test Report on an Icetouch powder with final evaluations after returning from Florida; for more information, on Decoral website result of natural weathering test for Icetouch powder are available.

The image shows a test report for a Florida Natural Exposure test. The report includes the following information:

- Test Report:** Florida Natural Exposure
- Decoral LAB** Research and Development
- 195**
- Florida Test** (indicated by a sun icon)
- Total duration:** 12 months (indicated by a clock icon)
- EXPOSURE PERIOD:**
  - FROM: 23/05/2014
  - TO: 27/05/2015
- LAB. ID NUMBER:** 34097
- POWDER COATING:** icetouch-012
- HEAT TRANSFER FILM:** 6052/01
- Grey Scale:** 4/5
- residual gloss:** 74%
- Technical Remarks:** Excellent residual gloss and low colour variation.
- Technical Opinion:** Suitable for OUTDOOR USE
- Test was carried on samples prepared according to technical specifications supplied by raw materials manufacturers.**
- QUALIDECO REQUIREMENTS:** The residual gloss must be at least 50% of the original gloss. The final evaluation will be based on visual inspection with the naked eye, with a maximum value of 4 on the grey scale (ISO 105-A02).

The report also includes a photograph of the test panel, showing an unexposed area (reference) and an exposed area. The exposed area shows a significant change in color and texture compared to the unexposed area.

Picture 5: Test report on 12 months Florida natural weathering test of Icetouch-012 decorated with film 6052/01.

Dedicated marketing material:

- MRK-005-0187



- MRK-005-0219



Marchi di qualità registrati di Decoral System:



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