



SALTLAKE-XXX

Special surface powder coatings



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MRK-012-0110

1. TECHNICAL INFORMATION

• TECHNICAL DATA

Chemical nature	Modified polyurethane
Finish	Special textured
Class of resistance	Class 1
Yield in surface/mass	13,1 m ² /Kg
Specific weight	1,27 ± 0,03 g/cm ³

• APPLICATION AND CURING CYCLE

Available for corona charging.

Curing time and temperature:

- 30 minutes at 190°C (metal temperature).
- 25 minutes at 195°C (metal temperature).
- 20 minutes at 200°C (metal temperature).

Recommended thickness: 120 micron.

• MECHANICAL PROPERTIES

Test	Standard Reference	Result	
Buchholz	ISO 2815	ok	
Cross-cut	ISO 2409	no loss of adhesion; ok	
Impact 2,5 N*m	ISO 6272	ok	
Bending	ISO 1519	no loss of adhesion; ok	
Salt spray	ISO 9227	corrosion <4 mm; ok	

2. **LOW-CURE VERSION**

For this series of powders a low-curing version is available, which allows to obtain completely the Saltlake effect at *lower temperatures and/or in a shorter time*.

The code for this variants is **Saltlake-1XXX** ("1" at the beginning of the three-digit code that identifies the color)

Curing conditios for Saltlake-1XXX:

- 30 minutes at 175°C (metal temperature).
- 25 minutes at 185°C (metal temperature).
- 20 minutes at 190°C (metal temperature).

This variant allows the following advantages:

- Energy saving;
- Possible use with every kind of oven, since the same curing conditions of standard polyester powders are required;
- Possible application on objects made of *zama* and other materials that at 200°C (curing temperature of standard Saltlake powders) could give surface defects.



Applicazioni di polveri saltlake: cassette della posta decorate rispettivamente con Saltlake-005, Saltlake -023 e Saltlake -001

3. PRODUCTS AVAILABLE IN STOCK

• PRODUCT CODE

SALTLAKE-001	SALTLAKE-002	SALTLAKE-003	SALTLAKE-004
SALTLAKE-005	SALTLAKE-006	SALTLAKE-007	SALTLAKE-008
SALTLAKE-009	SALTLAKE-010	SALTLAKE-011	SALTLAKE-012
SALTLAKE-013	SALTLAKE-014	SALTLAKE-015	SALTLAKE-016
SALTLAKE-017	SALTLAKE-018	SALTLAKE-019	SALTLAKE-020
SALTLAKE-021	SALTLAKE-022	SALTLAKE-023	SALTLAKE-024
SALTLAKE-026			

• PACKAGING



Cardboard packaging; net weight 20 Kg – Lower weight miniboxes are available

4. TESTS CARRIED OUT

Tests have been performed to determine under which conditions the Saltlake effect is regularly obtained.

• TEMPERATURE GRADIENT

The temperature gradient is a relevant factor for the powder coating in terms of the resulting aspect. Several gradients have been tested on this series of powders to determine which is the limit of increase to obtain a correct Saltlake effect.

The temperature was controlled with thermal probe (metal temperature).

Gradient limit: 1,76 °C/s - 105,6 °C/min.

Higher increases, i.e. high temperatures reached faster than this, may result in an inhomogeneous effect.



Saltlake-001 cured with a gradient of 105,6 °C/min. The surface is slightly less "wrinkled", but the effect is homogeneous and has formed correctly

Very low gradients have been tested as well (down to 0.07°C/s - 3.97°C/min), but no problem has been observed in terms of the final aspect.

• TEMPERATURE FOR THE FORMATION OF THE SALTLAKE EFFECT

The Saltlake effect has been observed *during* its formation: temperatures and times required have been registered.

Temperature of formation: 175°-185°C (347°F -365°F).

Time required: 60 seconds.

The temperature was checked with thermal probe (metal temperature); the cross-linking has been carried out with a standard gradient of temperature.

The formation of the effect could be inhomogeneous or just partial if 185°C temperature is not exceeded.

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• THICKNESS

To obtain the correct formation of the saltlake effect on the surface to be coated it is necessary a thickness of powder equal to about 120 μ m. After curing, the thickness measured will result equal or *higher* than 120 μ m, due to the characteristic wrinkled surface that has formed.

Because of the special textured surface, it is recommended to determine the thickness on the average value of *at least 8 measurements* on the reference area.



Thickness measured: **130 μm**Correct formation of the saltlake effect.

Thickness measured: $100 \ \mu m$ Incomplete formation of the saltlake effect.

Thickness measured: **70** μ m No saltlake effect.

• **DEFECTS**

If the surface to be coated is not well clean, or if the object has not been completely degassed (for materials that require this kind of treatment), after curing we may observe defects like those shown in the picture below, that look like small craters, with a "star" pattern around it. They form where the stains were.



5. MARKETING MATERIAL





A3 catalogue with aluminum samples

With each 20 kg product order will be delivered a copy FOR FREE of the A3 catalogue with aluminum samples.

On demand, it is possible to customize the marketing material.

