POLYURETHANE POWDER COATINGS

**APPLICATION**

Facades, construction and agricultural machinery, outdoor facilities, noise barriers, industrial goods, universal application.

**PROPERTIES**

- Colour shade: all RAL, RDS, NCS, Pantone, Munsell etc. – also customer samples
- Finish: smooth, fine texture, rough texture, thin film, and effects from flat to high gloss
- Gloss: from flat to high gloss
- Density: ca. 1.5 g/cm³, depending on colour shade and quality
- Spreading rate: depends on the applied film thickness, c.f. formula
- Storage life: average of 24 months

Due to its good weather and high chemical resistance, the PUR powder coating is a universal coating perfectly suited for indoor and outdoor applications. Providing high scratch resistance and elasticity it is an ideal coating for gardening and agricultural tools and machinery which are exposed to high mechanical stress.

- high chemical resistance
- good mechanical properties
- excellent levelling
VALUES WERE CALCULATED ACCORDING TO THE FOLLOWING FORMULA:

Theoretical spreading rate (m²)/(kg) = \( \frac{1000}{\text{density} \times \text{film thickness}} \)

### COATING PROPERTIES

<table>
<thead>
<tr>
<th>Test</th>
<th>Specification</th>
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</thead>
<tbody>
<tr>
<td>Erichsen cupping test</td>
<td>DIN EN ISO 1520, &gt; 8 mm</td>
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<tr>
<td>Mandrel bend test</td>
<td>DIN EN ISO 1519, good over 10 mm mandrel</td>
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<tr>
<td>Salt spray test</td>
<td>DIN EN ISO 9227, &gt; 240 hours without undercutting (corrosion creep) or blistering after appropriate pre-treatment</td>
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<tr>
<td>Condensation water test</td>
<td>DIN EN ISO 6270-2, &gt; 240 hours without undercutting (corrosion creep) or blistering after appropriate pre-treatment</td>
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</tbody>
</table>

Resistance: good regarding lye and acids – has to be tested individually

### PROCESSING

**Finish:**
Aluminium, die-cast aluminium, steel – thorough degreasing required. To increase corrosion protection, a conversion layer is recommended.

**Application:**
all common processes (Tribo, Corona)

**Curing conditions:**
10 minutes at 180 to 200 °C object temperature

**Overcoatability:**
Can be overcoated with the same product or with special repair coatings.

### CURING CONDITIONS

SERIES 03 POLYURETHANE POWDER COATINGS – Curing window

![Curing window graph]

Light colour shades can cause a shift. The maximum temperature is around 210 °C. All data refer to object temperature.

### THEORETICAL SPREADING RATE

Values were calculated according to the following formula:

Theoretical spreading rate (m²)/(kg) = \( \frac{1000}{\text{density} \times \text{film thickness}} \)

These data are based on empirical values for the completeness of which we do not assume any guarantee. Since we cannot influence in any way the processing of the product, the purchaser is responsible for ensuring that the product is suitable for the intended purpose before using the product. Any change in the processing procedure, environmental conditions, or the non-observance of instructions can influence the result negatively. Status 07/2015.