

## Premium Polyester Powder 5939



Highly weather-resistant texture powder coating in wrinkle look for exterior use in extreme climatic conditions

### Field of application

For exterior and interior coatings with the highest quality and visual requirements, e.g., facade and building elements, window elements, garage doors, vehicle parts, lights, fences, large-scale constructions, noise barriers, etc.

### Properties

- Excellent weathering resistance
- Excellent gloss and color stability
- Good corrosion protection properties
- Good chemical resistance
- Good mechanical resistance
- covers uneven areas and substrate defects
- After appropriate pretreatment, suitable for different metallic substrates
- After complete curing and cross-linking, the paint film is physiologically harmless

### Material description

<b>Basis</b>	Polyester resin
<b>Color shades</b>	Due to the limited availability of weather-resistant pigments, the product range includes a limited number of different color shades.
<b>Gloss grade</b>	Dull matt, $\leq 5$ GU/60° (in accordance with DIN EN ISO 2813) The measured gloss grade may deviate in the case of metallic colors.
<b>Density</b>	1.30–1.80 g/cm <sup>3</sup> (in accordance with DIN ISO 8130-2)
<b>Theoretical covering rate</b>	Approx. 645 m <sup>2</sup> /kg (at 1 µm dry layer)
<b>Grain distribution</b>	< 12% < 10 µm 28–50 % < 32 µm > 88 % < 90 µm (laser measuring device)
<b>Cross cut</b>	Gt 0 (in accordance with DIN EN ISO 2409)
<b>Cupping index</b>	≥ 3 mm (tape test) (in accordance with DIN EN ISO 1520)
<b>Impact test</b>	Direct: ≥ 10 ip (tape test) (according to ASTM D 2794-69)

### Material description

**Salt spray test** Delamination at the scribe  $\leq 1$  mm (in accordance with DIN EN ISO 4628-8)  
on aluminum substrate <sup>1)</sup> > 1,000 h (in accordance with DIN EN ISO 9227-NSS)

**Condensation water test** Degree of blistering 0 (S0) (in accordance with DIN EN ISO 4628-2)  
on aluminum substrate <sup>1)</sup> > 1,000 h (according to DIN EN ISO 6270-2)

**Rapid weathering QUV-B/SE** after 600 hours residual gloss  $\geq 50$  % of initial gloss  
(in accordance with DIN EN ISO 16474-3)

**Outdoor weather exposure Florida (5° south)** after 3 years residual gloss  $\geq 50$ % of initial gloss  
(in accordance with ISO 2810)

<sup>1)</sup> with a suitable chromium-free passivation

**Labeling** See current safety data sheet.

### Coating recommendation

Substrates <sup>2)</sup>	Prime coating	Top coat
<b>Aluminum</b> suitably passivated  <b>Steel</b> Sand-blasted (degree of purity min. SA 2 ½ in accordance with DIN EN ISO 12944, part 4)	Not suitable	Premium Polyester Powder 5939 approx. 60–90 µm

<sup>2)</sup> The substrate must generally be free of fats, oils, separating and drawing agents, as well as dirt and corrosion products and other contaminants (this applies, in particular, to using directly fired gas ovens) and pretreated in accordance with the corrosion protection requirement.

### Use

**Compatibility** Different batches or powder coat qualities cannot always be mixed / are not always compatible with one another. Surface defects such as gloss reduction, specks, craters, orange peel effect, etc. can be the result of an incompatibility. If applicable, appropriate tests shall be carried out before application.

**Application temperature** 15–25°C

**Humidity** < 75% relative humidity

## Application method

<b>Application method</b>	In general, good grounding of the substrate must be ensured. The fluidizing, feed, and dosage air must be oil- and condensate-free. To achieve a consistent coating quality, maintain a constant ratio of fresh powder and recycled powder. The share of recycled powder in the system should generally be below 35%. Special application instructions must be followed when applying metallic powder paints. See "Metallic powder paints – Special features for the application of metallic powder paints".
<b>Corona application</b>	Use of appropriate coating programs depending on the geometry of parts and use case (possible use of maximum spray current).  For application systems without maximum spray current: Voltage: 70–100 kV (first coat) 40–50 kV (additional coat)
<b>Tribo application</b>	Is not possible

## Stoving conditions

Duration	Object temperature
12–25 min.	at 190°C
7–15 min.	at 200 °C

## Container sizes

20 kg, 500 kg (25 polyethylene bags of 20 kg each)  
Additional container sizes available on request.

## Storage time

6 months after receipt of goods.  
Store in a sealed container in a dry place and at room temperature (max. 25°C). Protect from heat sources and direct sunlight.

<b>Minimum shelf life</b>	Refer to label
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Brillux GmbH & Co. KG Industrial Coatings  
Otto-Hahn-Straße 14  
59423 Unna  
Tel. +49 2303 8805-0  
Fax +49 2303 8805-119  
[info@brillux-industrial-coatings.com](mailto:info@brillux-industrial-coatings.com)  
[www.brillux-industrial-coatings.com](http://www.brillux-industrial-coatings.com)

