

Premium Polyester Powder 5936

5936.-.1013

**Highly weather-resistant powder coating with VG 95211
quality certificate for exterior use in extreme climatic
conditions, dull matt**



Field of application

For interior and exterior coatings with the highest quality and visual requirements for the repair and painting of Bundeswehr equipment and vehicles.

Properties

- Excellent weathering resistance
- Excellent gloss and color stability
- Good corrosion protection
- Good resistance to chemicals
- Very high surface hardness
- Good mechanical parameters
- Excellent cleanability
- Excellent leveling characteristics
- After appropriate pretreatment, suitable for various metallic substrates (see coating recommendation)
- Once fully cured (crosslinked), the paint film is physiologically safe

Approvals / permits

Approval (quality certificate) in accordance with VG 95211, meets the German Bundeswehr requirements TL 8010-0002 Class IV, Type 3 (approval number: WIWeB 440.17.02P43B4.1 (first approval: WIWeB report no. R1/0000025233-37 from Jan 31, 2022))
The resistance to chemical warfare agents according to STANAG 4360 was not part of the approval test.

Material description

Basis	Polyester resin
Color shades	RAL 1013 HR (pearl white)
Gloss grade	dull matt, ≤ 5 GU/60° (in accordance with DIN EN ISO 2813)
Density	1.41–1.47 g/cm ³ (in accordance with EN ISO 8130-2)
Theoretical yield	Approx. 695 m ² /kg (at 1 µm dry layer)
Grain distribution	< 12% < 10 µm 40–44% < 32 µm > 94% < 90 µm (laser measuring device)
Cross cut	Gt ≤ 1 (in accordance with DIN EN ISO 2409)
Cupping index	≥ 3 mm (in accordance with DIN EN ISO 1520) ¹⁾
Buchholz hardness	≥ 90 (in accordance with DIN EN ISO 2815)
Salt spray test	Delamination at the crack ≤ 1 mm (in accordance with DIN EN ISO 4628-8) On aluminum substrate ²⁾ > 1,000 hours (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 ²⁾ > 1,000 hours (in accordance with DIN EN ISO 6270-2)
Accelerated weathering QUV-B/SE	After 600 hours, the residual gloss ≥ 50% of initial gloss (in accordance with DIN EN ISO 16474-3)
Outdoor weathering in Florida (5° South)	After 3 years, ≥ 50% of initial gloss remained from the original gloss (in accordance with ISO 2810)
Impact test	Direct: ≥ 20 ip (tape test) (in accordance with ASTM D 2794-69) ¹⁾
Labeling	See current safety data sheet. ¹⁾ with 60 µm layer thickness ²⁾ suitable passivated

Coating recommendation

Substrates ³⁾	Prime coat ⁴⁾	Top coat
Aluminum/stainless steel/galvanized steel suitable passivated	Normally not required	Premium Polyester Powder 5936.-.1013, approx. 80–90 µm
Steel Sand-blasted (degree of purity min. SA 2 ½ in accordance with DIN EN ISO 12944, part 4)	If necessary, Corro-Protect EP 5816 (light gray) 60–80 µm	
Steel Sand-blasted (degree of purity min. SA 2 ½ in accordance with DIN EN ISO 12944, part 4) and zinc-phosphated Aluminum suitable passivated	If necessary, CDP (epoxy resin-based) 15–40 µm	

³⁾ Generally, the substrate must be free from grease, oil, separating and drawing agents as well as corrosion products and other impurities (this applies to the use of directly fired gas furnaces in particular), and pretreated according to the corrosion protection requirements.

⁴⁾ For steel with primer coating for the highest corrosion protection requirements

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., may result from incompatibility. If applicable, appropriate tests shall be carried out before application.

Application temperature 15–25°C

Humidity < 75% relative humidity

Application method

Application method In general, good grounding of the substrate must be ensured. The fluidizing air, feed air and dosage air must be free of oil and condensate. 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%.

Corona application 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 (for the first coat)

Voltage: 40–50 kV (for additional coats)

Tribo application Is possible

Stoving conditions

Duration	Object temperature
20–40 minutes	At 180°C
15–30 minutes	At 190°C
10–20 minutes	At 200°C

Container sizes

20 kg single box
500 kg box with 25 polyethylene bags at 20 kg each
Additional container sizes available on request.

Storage time

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

Minimum shelf life Refer to label

Remark

This technical data sheet is based on extensive development work and years of practical experience. Its content does not constitute a contractual legal relationship. The user/buyer is not released from the responsibility of checking our products to ensure they are suitable for the intended application. In addition, our general terms of business apply.

Upon publication of a new version of this technical data sheet as a result of new technical developments, all of the information provided above becomes invalid. You can obtain the latest version from your personal Brillux contact person or at www.brillux-industrielack.de, version 2 as required.

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