



BASE: POLYESTER RESIN

CEWEPROTECT

CEWEPROTECT powder coatings are an advanced development of the CEWEPOL WB product line. They are formulated using high-quality polyester resins that undergo chemical crosslinking when properly stoved, resulting in a durable, hardened finish. These coatings offer an exceptional resistance to UV radiation, weathering, and corrosion, combined with excellent mechanical performance. Recommended stoving conditions range from >10 minutes at 170°C to 10 minutes at 180°C (object temperature).

FIELDS OF APPLICATION

- Suitable for in- and outdoor purpose such as:
- Agricultural machinery, lawnmowers, garden tools, utility vehicles, steel construction, camping articles, sport equipment, etc.

- Excellent corrosion resistance also on iron phosphated substrates
- Very good mechanical properties
- High surface hardness
- Good stability against UV-light
- Energy saving stoving conditions

PRODUCT RANGE

- Products can be tailored to specific customer needs
- Numerous color shades are available

APPLICATION

- Electrostatic powder coating, corona and tribo**

** tribo modified powdercoatings belong to a special product group. All previous information meets the current state of the art. The information is based on both practical experience and thorough testing. These recommendations and suggestions herein are made without guarantee as to the results. The suitability of the product for an intended use shall be solely up to the user.

GLOSS AND SURFACE

Surface	Gloss according ISO 2813, reflected at 60° angle					
	deep flat (0-9°)	flat (10-29°)	satin (30-49°)	semi-gloss (50-79°)	glossy (80-95°)	high-gloss (> 95°)
Smooth	—	—	—	■	■	■
River Texture	—	—	—	—	■	—
Fine texture	■	■	—	—	—	—

PRETREATMENT

- Substrate must be free of scale, dirt and oil, for example through an alkaline degreasing process
- Blasting
- Sweeping
- Iron phosphating
- Chrome free conversion systems such as titanium or zirconium based compounds that build nano ceramic conversion layers
- Zinc phosphate
- Chromate

Depending on the substrate and the application purpose one of the above mentioned pretreatments will be suitable.

TECHNICAL DATA

The following properties have been achieved on iron phosphated steel panels, 0,75mm, Gardobond WH/W/OC:

	Standard, glossy
Film thickness ISO 2360	(70 ± 10) µm
Reflection value Reflection angle 60°, ISO 2813	80 – 95 (glossy)
Crosscut ISO 2409, multi-cross cutter, 2 mm	Characteristic 0
Film hardness according Buchholz, ISO 2815	> 90
Mandrel ISO 1519	≤ 6 mm
Cupping test ISO 1520	≥ 8 mm
Salt spray test ISO 9227	1000 hours Creepage at cut ≤ 5mm
Condense water test QUV-B 313 Test according to ISO 16474-3	[300 hours] Gloss retention: >50%
Impact resistance 6272	≥ 100 cm * 1 kg

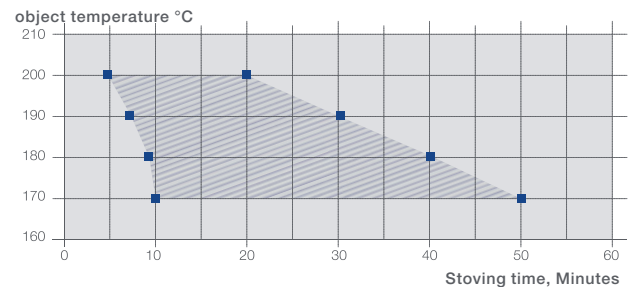
* reflected at 60° angle

SUBSTRATES

- Steel, alloyed steel. Stainless steel should be chemically or mechanically etched (adhesion has to be checked)
- Galvanized steel, aluminum and aluminum alloy (adhesion needs to be checked)
- Other metal substrates
- Ceramic / glass

STOVING CURVE

Stoving conditions (180°C-Versions)



SPECIFIC GRAVITY (ISO 8130-2)

1,2-1,7g/cm³ depending on quality and colour

PACKAGING

- 20kg carton (18kg on a pallet)
- Welltainer (20 kg plastic bags: 340-500kg)
- Super Bag (350 - 700kg)
- Tote (450 – 750 kg)

POWDER CONSUMPTION

$$\text{Material price €/m}^2 = \frac{\text{price €/kg} \times \text{spec.gravity g/cm}^3 \times \text{film thickness in } \mu\text{m}}{1000}$$

STORAGE STABILITY

At least 12 months when stored dry and cool at max. 25°C