

Product

Field of application

- powder coating system for exterior applications like garden furnitures, steel constructions, construction or agriculture machines, fences

Properties

- label-free Polyester resin base
- with decorative PREMIUM metallic effect (manufactured by bonding technique)**
- facade quality with excellent weather resistance
- approved by GSB and QUALICOAT
- colour stability at different curing conditions
- very good mechanical properties
- good hiding power on critical edges
- including gas release additive

Details

- colour shade all RAL and also special colourshades are possible
- surface smooth
- gloss glossy (visual)
- density 1,3 - 1,8 g/ml (depending on colour shade)
- spreading rate 9 - 13 m²/kg (at 60 µm layer thickness)

Storage

- 24 months at dry and cool storage up to max. +25°C

Processing

Substrates pre-treated parts of aluminium, steel and galvanized steel

Preparation

- grease, oil, tinder and oxidation products have to be removed from surface before coating

Pre-treatment

aluminium	chromating or chrome-free pre-treatment
steel	blasting, iron-phosphatisation, zinc-phosphatisation
galvanized steel	sweeping, chromating, zinc-phosphatisation

the coater has to check the suitability of pre-treatment referring to customer demand previously. According to requirements an additional primer could be necessary. In this case we advice our product **MEGAPRIMER® EP**.

Application

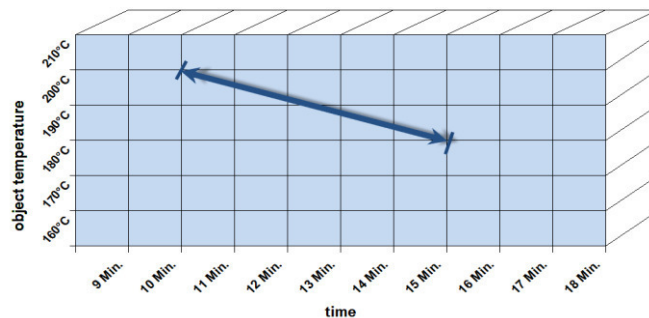
- electrostatic

Layer thickness

- 60 - 100 µm (depending on colour shade and application)

Curing cycle

- 15 Min - 180 °C (recommended)



Recoatibility

- product can be recoated by itself
- recommendation about appropriate liquid coats on request

Test results		
Proved substrate	• aluminium 0,8 mm, chromated, layer thickness 60 µm	
Physical/mechanical	• cross cut test DIN EN ISO 2409	Gt 0
	• bending test 5 mm thorn DIN EN ISO 1519	no cracks
	• impact test 1 kg / 25 cm ASTM D2794	no cracks on both sides
	• Erichsen Cupping test DIN EN ISO 1520	6 mm
	• Buchholz hardness DIN EN ISO 2815	at least 80
Corrosion resistance	• Kesternich test (24 cycles) DIN ISO 3231	corrosion creepage < 1 mm
	• salt spray test (neutral) DIN EN ISO 9227	1000 hours - corrosion creepage < 1 mm
	• humidity chamber test DIN EN ISO 6270-2	1000 hours - corrosion creepage < 1 mm
	• mortar test ASTM D3260	no residues after 24 h
	• boiling Water test	no loss of adhesion after 2 h
Weather resistance	• accelerated Weathering DIN EN ISO 11507	at least 300 h UV-B (313 nm) gloss retention >50 %
	• XENON test DIN EN ISO 11341	1000 h gloss retention >50 %
	• natural weathering in Florida DIN EN ISO 2810	12 month exposure (5° South) gloss retention >50 %
Certificates	• GSB-license no.	282 a
	• QUALICOAT-license no.	P-0366
Further certificates	on request	

Notes		
Occupational safety/health environmental protection	• please note information of corresponding safety data sheet	
Processing	• please note our reference note concerning the processing of metallics	

The technical data sheet is for information only and without any responsibility. It does not release to test our products previously regarding suitability according to operation purpose. CENARIS reserves the right of changes without notification. Therefore only the current version is valid. If in doubt, please contact us.

General details

- Please note the data sheet concerning the processing of powder coatings with metallic effect published by " Verband der deutschen Lackindustrie". Please download it under the following web page.
[www.lackindustrie.de/Publikationen Technische%20Veroeffentlichungen/Seiten/Uebersichtsseite.aspx](http://www.lackindustrie.de/Publikationen_Technische%20Veroeffentlichungen/Seiten/Uebersichtsseite.aspx)

Additional details

- It should generally only be coated with electrostatic charge (corona).
- The coating of large areas should be done only with automatic systems.
- The coating of metallic powder coating is generally more demanding than the of general powder coating. Please check previously the optimal adjustment of the coating plant.
- Inside the coating cabin it should be used always the same spray pistols. This is especially important for parts which should to be combined later.
- The parameter of the construction (high voltage, conveying air, scavenging air, distance spray pistol/substrate) must not be changed during the coating process.
- It must paid attention to proper grounding of the parts.
- Only use fresh powder if possible.
- Complex geometries should always be pre-coated. When recoating there may be clouding, blowing effects and back spray effect.
- Recycling powder must be dosed continuously in a constant relationship.
- If possible only use pistols with flat jet nozzles.
- The pistols must be blowed out regularly.
- Be careful by using baffles as an attachment of pistols. Even by ventilated pistols disposal can occur.
- Coat the face plan side at last if you coat on both sides.
- For a uniform mixture of the powder coating fluidisable reservoir should be used. Due to this effect deviations are limited.
- Layer thicknesses sholuld not be too high or low, 80 - 100 µm max. 120 µm.
- For a coating application powder should be used out of one batch if possible. The use of a new batch must be examined previously.