

Product

Field of application

- powder coating system for interior- and exterior (two coat) applications like rims, bicycles, motorcycles, shop furniture, design furniture etc.

Properties

- label-free polyester resin base
- with decorative PREMIUM metallic effect (manufactured by bonding technique)**
- very good weather stability
- yellowing stability at different curing temperatures
- very good mechanical properties
- very good scratch resistance

Details

colour shade	colorless-metallic
surface	smooth
gloss	glossy (visual)
density	approx. 1,2 g/ml
spreading rate	12 - 14 m ² /kg (at 60 µm layer thickness)

Storage

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

Processing

Substrates

aluminium, steel, galvanized steel and powdercoated parts

Preparation

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

Pre-treatment

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

the coater has to check the suitability of pre-treatment referring to customer demand previously. Previous powder coatings have to be fully cured according to specification of supplier.

Application

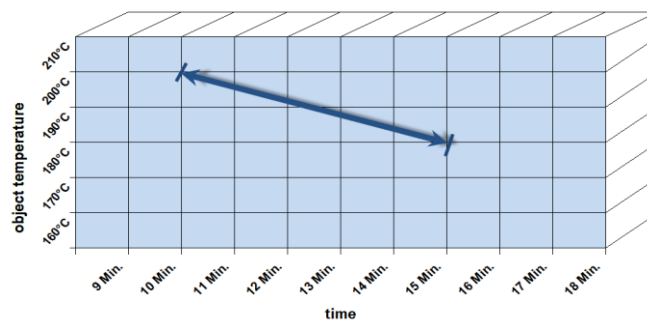
- electrostatic

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	<ul style="list-style-type: none"> aluminium 0,8 mm, chrome-free, layer thickness 60 µm
Physical/mechanical	<ul style="list-style-type: none"> cross cut test Gt 0 DIN EN ISO 2409 bending test 5 mm thorn no cracks DIN EN ISO 1519 impact test 1 kg / 35 cm no cracks on both sides ASTM D2794 Erichsen Cupping test 6 mm DIN EN ISO 1520 Buchholz hardness at least 80 DIN EN ISO 2815
Corrosion resistance	<ul style="list-style-type: none"> Kesternich test (24 cycles) corrosion creepage < 1 mm DIN ISO 3231 salt spray test (neutral) 1000 hours - corrosion creepage < 1 mm DIN EN ISO 9227 humidity chamber test 1000 hours - corrosion creepage < 1 mm DIN EN ISO 6270-2 mortar test no residues after 24 h ASTM D3260 boiling Water test no loss of adhesion after 2 h
Weather resistance	<ul style="list-style-type: none"> accelerated Weathering at least 300 h UV-B (313 nm) gloss retention >50 % DIN EN ISO 11507 XENON test 1000 h gloss retention >50 % DIN EN ISO 11341 natural weathering in Florida 12 month exposure (5° South) gloss retention >50 % DIN EN ISO 2810
Certificates	<ul style="list-style-type: none"> on request this material has no approval by GSB or QUALICOAT

Notes	
Occupational safety/health environmental protection	<ul style="list-style-type: none"> please note information of corresponding safety data sheet
Processing	<ul style="list-style-type: none"> please note our reference note concerning the processing of metallics (see encl.) solid paint colors can look very different after overpainting with this product. previously please harmonize with end customer.

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.
<https://www.wirsindecolor.de/service-publikationen/technische-veroeffentlichungen-pulverlacke>

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 should 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.