

Product

Field of application

- powder coating system for exterior applications like metal facades, winter gardens, garden furniture, steel structures, construction machinery, agricultural machinery, fences, etc.

Properties

- label-free polyester resin base
- with decorative PREMIUM metallic effect (manufactured by MEGABOND® technology)**
- facade quality with very good weather stability
- tested according to GSB and QUALICOAT
- suitable for directly heated gas ovens
- very good mechanical properties
- good coverage, even on critical edges
- inclusive fumigation additive for galvanized substrates



Details

- colour shade: all RAL and also special colourshades are possible
- surface: fine structure
- gloss: matt (visual)
- density: 1,4 - 1,8 g/ml (depending on colour shade)
- spreading rate: 8 - 11 m²/kg (at 70 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:

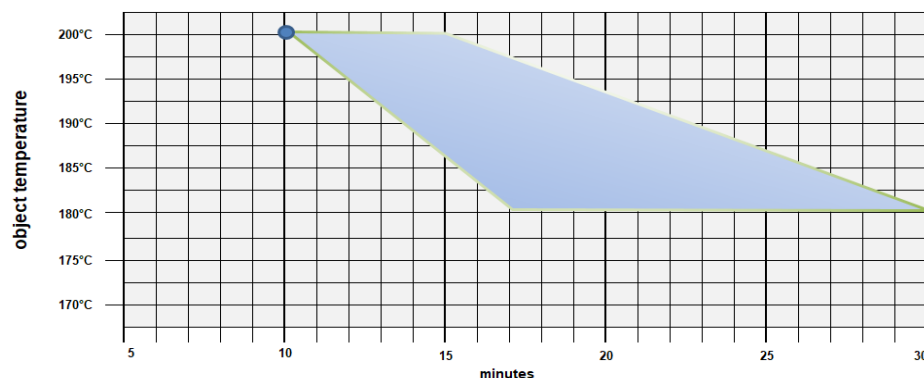
- aluminium: chromating, chrome-free pre-treatment, pre-anodisation
- steel: blasting, iron-phosphating, zinc-phosphating
- galvanized steel: sweeping, chromating, chrome-free pre-treatment, zinc-phosphating

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 ISO 2360: 70 - 110 µm (depending on colour shade and application)

Curing cycle: 10 min - 200°C (● recommended)



Recoatibility

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

Test results		
Proved substrate	• aluminum 0,8 mm, pretreated according to GSB / QUALICOAT, layer thickness 60 µm	
Physical/Mechanical	• cross cut test	Gt 0 DIN EN ISO 2409
	• bending test	5 mm no cracks DIN EN ISO 1519
	• impact test	>20 inchnp. no cracks on both sides ASTM D2794
	• Erichsen cupping test	≥ 5 mm DIN EN ISO 1520
	• Buchholz hardness	at least 80 DIN EN ISO 2815
	Corrosion resistance	• keesternich test (S02)30 cycles
• salt spray test (NSS + AASS)		1000 hours - corrosion creepage ≤ 1 mm - no bubbles DIN EN ISO 9227
• humidity chamber test		1000 hours - corrosion creepage ≤ 1 mm - no bubbles DIN EN ISO 6270-2
• mortar test		no residue after 24 h ASTM D3260
• boiling test		no detachment after 2 h
Weather resistance	• accelerated weathering	min. 300 h with a residual gloss ≥ 50 % DIN EN ISO 16474-3 (UV-B 313nm)
	• accelerated weathering	min. 1000 h with a residual gloss ≥ 50 % DIN EN ISO 16474-2 (XENON)
	• Florida outdoor exposure	12 months storage (5 °south) with a residual gloss ≥ 50% DIN EN ISO 2810
Certificates	• GSB standard QUALICOAT class 1	approval no. 282 c approval no. P-0769
Further test certificates	• on request	

Notes		
Occupational safety/ health environmental protection	• please note information of corresponding safety data sheet	
Colour shade deviation	• colour shade deviation according to VdL-RL 10 (actual version)	

This technical data sheet is based on our current state of knowledge. It is not a product specification.
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.

The current technical data sheets and safety data sheets can be found at www.cenaris.com/downloads

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.wirsindfarbe.de/fileadmin/user_upload/Dokumente/2017-09-27-Merkblatt-Pulverlack-Metallic-Effekt.pdf

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.

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