

Type of coating PU - POLYUERTHANE POWDER COATINGS TO OUTSIDE

Color RAL 9005

Symbol PU973/0/0013/07

Surface Wrinkle effect

Gloss Semi-matt

Characteristics

- Outdoor, industrial, standard application
- High weather resistance
- High UV-light resistance
- High chalking resistance
- Good chemicals resistance
- High covering power
- High decorative and protective effect

Applications For covering external and internal steel and aluminium elements.

Powder properties

Particle size (Malvern)	Fine powder suitable for electrostatic spray (corona) and tribocharging (tribo)
Density (g/cm³) ISO 8130-2	1,607
Theoretical coverage (m²/kg)	~ 7 by the film thickness 90 µm i 100 % use of powder coating
Storage stability	12 months from the date of production, in the original, unopened package, keep away from heat sources, at temperatures at 5-25°C, protect from moisture. No direct sun exposure. The product should be stay at ambient temperature (paint shop) 12h before use.

Coating film
tested in lab conditions on:
steel panel

Thickness ISO 2808	90 - 120 µm
Gloss (60°) ISO 2813 ¹ VISUAL ²	compatible
Cross cut ISO 2409	0
Mandrel bending ISO 1519	>5 mm
Erichsen cupping ISO 1520	>5 mm
Impact resistance ISO 6272-1	front >50 cm*1kg rewers >=50 cm*1kg
Buchholz hardness ISO 2815 ³	not applicable
Pencil hardness ISO 15184 ³	not applicable

(1) applies to smooth and no metallic coatings film
(2) applies to structural and metallic coatings film
(3) not applicable structural coatings film

Surface pretreatment	<ul style="list-style-type: none">- The overall quality of the coating film depends on the type and quality of the pretreatment.- Surfaces must be dry, degreased and free from rust and other contaminants.- In order to improve coating adhesion to the surface and improve resistance it is recommended: aluminium - chromating, chrome-free pretreatment or anodic pretreatment steel and galvanized steel - individual choice of surface pretreatment (e.g. phosphating). However, in order to achieve optimum results, you must follow the instructions and recommendations of the pretreatment material manufacturer.
Application	<ul style="list-style-type: none">- Electrostatic gun - corona (recommended voltage is 60 kV) or tribo gun, with the exception of metallic effects - should be applied only technology corona.- Application parameters depend on the geometric shapes of the detail and the film thickness to be reached. Responsibility for the correct application parameters rests on the coating applicators.- Despite careful production methods, may be small deviation color and effect deviation between the different manufacturing batches (it typical for powder coatings).- It is recommended to do the entire order on the same equipment, with the same application parameters.- If it is possible to apply the powder coating from one production batch.- Take care of proper grounding of application equipment and coated elements (color/effect will be repeatable).- Control the air speed during application of powder coatings.- Keep an appropriate distance: the gun - coated elements.- Keep a uniform thickness of coating.- Not be mixed with other powder coatings.
Curing conditions	<ul style="list-style-type: none">- Curing time recommendation in a convection oven: 200°C/10 min. or 180°C/15 min. (object temperature).- Must be strictly observed parameters of stoving the coating film to ensure that the full mechanical and chemical properties.- Suitability of the product for stoving in gas ovens and radiant ovens should be verified - may be a significant difference in color - perform a comparative test with the standard color (please contact us for details).
Approvals	<ul style="list-style-type: none">- The powder coatings are in compliance with 2011/65/EC and 2015/863/EC (so called ROHS) .- Heavy metal free.
Comments	<ul style="list-style-type: none">- Powder-coated details should be packaged after being completely cooled down to ambient temperature, into appropriate packaging materials previously tested by the user.- Packaged details should be stored under cover to avoid condensation, which may result in traces on the finished coating.- In the case of cleaning powder coated surfaces it is necessary strict compliance with the Technical recommendations 01: Cleaning of powder coated surfaces.
Safety Data Sheet	PU - POLYURETHANE POWDER COATINGS TO OUTSIDE
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The above values may vary depending on the type of surface pretreatment, color, gloss, texture, etc.
All informations included in this card are based on our experience and actual knowlegde and do not release the user from carrying out their own tests. If in doubt please contact us for details.
Having no influence on the use and application conditions, we can take responsibility only for the quality of any the product and ensure that it fits to our standards.
This Technical Data Sheet is revised periodically. EKO-COLOR reserves the right to change specifications without notice.
If necessary, our sales department will confirm the validity of this document.