

EKOLAK POLYESTER QUALICOAT - PEQ15

Polyester with HAA certified Qualicoat Class 1.5 is identified by the code:

- **super glossy** (PEQ15-01-1-XXXXX SG)
- **high glossy** (PEQ15-01-1-XXXXX)
- **glossy** (PEQ15-01-2-XXXXX)

General information - base

Bond based on saturated polyester resins, specially selected according to its resistance to weathering and UV radiation.
 Colour shade: according to RAL-card or according to the sample.
 Packing: in 25 kg cartons or in big-bags of 500 kg.

Powder properties

Density (ISO 8310-3): 1,2 to 1,7 g/cm³, depending upon the shade.
 Yield: 9,8 to 13,8 m²/kg at coat thickness of 60 µm, depending on the shade.
 Granulation (Malvern particle sizer): above 40 µm ... 40-55%.
 Method of application: traditional CORONA procedure, negative voltage 30-100 kV, possible supply of powder adequate for TRIBO system of application (mark T i.e. PEQ-XX-X-xxxxT).
 Temperature of powder coatings must be adjusted to the temperature of spraying line before the application.

Pre-treatment:

	STEEL	GALVAN. STEEL	ALUMINIUM
Mechanic cleaning/sandblasting	Suitable for bulk object	Less suitable	Less suitable
Cleaning/degreasing	Suitable as initial phase of pre-treatment	Suitable as initial phase of pre-treatment	Suitable as initial phase of pre-treatment
Iron phosphating	Second phase, suitable for customary requirements	Second phase, suitable for customary requirements	Not suitable
Zinc phosphating	Second phase, advisable for large-scale corrosion requirements	Second phase, advisable for large-scale corrosion requirements	Not suitable
Chrome coating	Not suitable	Partly suitable	Advisable
Zeta coat	Suitable	Suitable	Suitable
Nano ceramics	Suitable	Suitable	Suitable

Mechanical and technological features of the Ekolak Polyester Qualicoat PEQ15

To determine its mechanical properties the Ekolak was applied to the 0,6 mm thick cold-rolled metal sheet degreased with acetone and cured in the oven at the temperature, required for the particular type of the Ekolak.

Coat thickness: 55-80 µm (depending upon the quality).
 Gloss (ISO 2813) at the angle of 60°.

Labelling	% of gloss
1 – super glossy SG	> 90
1 – high glossy	> 80
2 – glossy	60-80

Hardness on Bucholz scale (ISO 2815): minimum 91.
 T-bend: minimum T4-OK/OK.
 Impact test (ISO 6272): direct: minimum 50 cm × kg,
 indirect: minimum 50 cm × kg.
 Adhesion (ISO 2409): Gt 0.

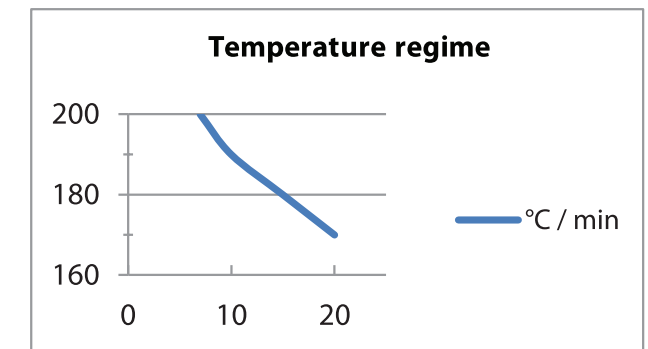
Curing conditions: 180 °C/15 min or 190 °C/10 min object temperature for high-glossy and glossy quality with standard reactivity.

In case of inadequate polymerization there is a possibility that the properties of the powder coatings changes:

- by curing on an inappropriate temperature gloss could decrease due to too high temperature,
- due to lower temperatures of curing the gloss may be higher than the prescribed and
- mechanical characteristics are potentially different due to the difference in temperature regime.

Options of curing (table of declared curing for temperature regime 180 °C/15 min):

Temperature (°C)	Time (min)
170	20
180	15
190	10
200	7



Storage time: 24 months at the temperature below 25 °C for standard coatings.

Areas of application::

- metal profiles,
- facades,
- windows,
- aluminium profiles ...