

# EKOLAK POLYESTER PRIMID - PE/P

<b>Super glossy SG</b> (PE/P-01-1-xxxxx SG), <b>high glossy</b> (PE/P-01-1-xxxxx), <b>glossy</b> (PE/P-01-2-xxxxx), <b>rough structured</b> (PE/P-21-4-xxxxx), <b>quality for low curing at 160 °C</b> (PE/P-06-X-xxxxx).	<b>Semi-glossy</b> (PE/P-01-3-xxxxx), <b>semi-matt</b> (PE/P-01-4-xxxxx), <b>matt</b> (PE/P-01-5-xxxxx), <b>high glossy and glossy with average mechanical properties</b> (PE/P-04-1-xxxxx, PE/P-04-2-xxxxx), <b>fine-structured</b> (PE/P-11-5-xxxxx).
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**General information - base**  
 Base: binding on the basis of saturated polyester resins, specially selected according to their resistance to the weather conditions and UV radiation.  
 Colour shade: according to RAL-card or according to the sample.  
 Packaging: 25 kg cartons or big-bags of 500 kg.

**Powder properties**  
 Density (ISO 8310-3): 1,2 to 1,7 g/cm<sup>3</sup>, depending upon the shade.  
 Yield: 9,8 to 13,8 m<sup>2</sup>/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. PE/P-XX-X-xxxxxT).  
 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 Polyester/HAA Ekolak**  
 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
3 – semi-glossy	40-60
4 – semi-matt	20-40
5 – matt	< 20

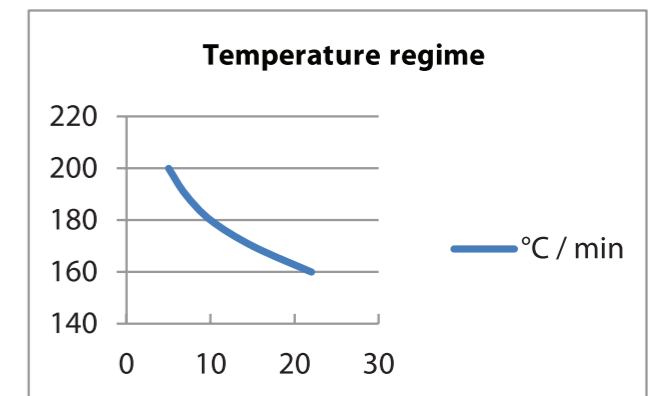
Hardness on Bucholz scale (ISO 2815): minimum 91. T-bend: minimum T4-OK/OK. Impact test (ISO 6272): direct: minimum 100 cm × kg, indirect: minimum 100 cm × kg. Adhesion (ISO 2409): Gt 0.	Hardness on Bucholz scale (ISO 2815): minimum 91. T-bend: minimum T4-OK/OK. Impact test (ISO 6272): direct: minimum 50 cm × kg, indirect: minimum 50 cm × kg. Adhesion (ISO 2409): Gt 0.
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<b>Curing conditions:</b> 180 °C/10 min or 190 °C/10 min object temperature, more reactive coatings available with 160 °C/10 min.	<b>Curing conditions:</b> 190 °C/10 min object temperature, for semi glossy, semi-matt, matt and fine-structured quality, 180 °C/10 min for high glossy quality.
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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/10 min):

Temperature (°C)	Time (min)
160	20-25
170	15
180	10 (declared temp. regime)
190	7
200	5



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

Resistance to the weather conditions - accelerated aging, QUV test. Test conditions: cycle - 8h UV at 60 °C + 4h 100% humidity at 40 °C, used bulbs: UV A 340 (340 nm).	Resistance to the weather conditions - accelerated aging, QUV test. Test conditions: cycle - 8h UV at 60 °C + 4h 100% humidity at 40 °C, used bulbs UV A 340 (340 nm).
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**Areas of application:**

- outdoor metal furniture,
- agriculture and garden tools,
- external car parts,
- air conditioners,
- mailboxes,
- advertising boards.