

## Powder coating P-PL-1321

<b>Use</b>	For obtaining protective and decorative coatings with varying degree of gloss and texture on metal products of various industries, as well as customer goods.
<b>Composition</b>	Homogeneous mixture of solid carboxylated polyester resins and hardener with pigments, fillers and special-purpose additives.
<b>Application area</b>	For coloring various metal products relating to machine-building, instrument-building, automobile industry, agricultural machinery, consumer goods, sport and game stock, construction designs and their elements, window and gate system operated indoors and outdoors.

<b>Pre-treatment</b>	Surface should be carried out depending on metal and subsequent operating conditions. The surfaces should not have burrs, burn-through, a metal discontinuities as cracks, etc. The radius of curvature of the sharp edges should be not less than 0.3 mm. Preparation before paint application should be done in accordance with GOST 9.402. Degreasing degree - 1, the surface cleaning degree from remove scale and rust - 2. It is allowed to prepare surfaces in ways are not provided in GOST 9.402. The pre-treatment process should include adhesion and a sufficient degree of purification from substances preventing staining and accelerate corrosion processes. The chemical pretreatment of the metal is recommended for the best protective properties/
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**Application method** electrostatic or tribostatic

**Curing**  
15 min/ 180 °C – object temperature  
10 min/ 200 °C - object temperature

<b>Properties</b>	<b>Powder form</b>	Fine powder without lumps or impurities.
	<b>Not solid contents weight</b>	Not more than 1%
<b>Surface properties</b>	<b>Grading</b>	- residue on sieve 0100,% , not more 5.0
	<b>Color</b>	Should match the control color of MAV Ltd., the colors of RAL catalog, samples-references agreed with the customer.
	<b>Appearance</b>	Same texture surface without mechanical impurities.

<b>Mechanical properties</b>	Coating impact strength, cm, not less than	
	For smooth surface	50*
	For structure surface	40**
	- Elasticity of the coating upon flexuring , mm, not more than	3*
	- Hardness of the coating upon tension , mm, not more than	5*
	- Adhesion of the coating, points, not more than	1
	* - the recommended thickness 60-80 mkm.	
	** - the coating impact strength is not regulated for structured surface with thickness more than 110 mkm	

**Thickness**  
For smooth surface – 60 – 80 mkm,  
for structure surface – 60 – 120 mkm,  
for rippled surface– 60 - 110 mkm.

**Theoretical Consumption**  
80 – 120 g/m<sup>2</sup> (by the film thickness 60-80 mkm). Consumption can fluctuate depending on the equipment, surface quality, personal qualification etc.

**Transportation and storage:** Powder coatings are transported in closed packing under the temperature from -40°C to +27°C. Shelf life — 18 month from the production date. Powder coatings store in a closed container at a temperature not more than 27 °C and at a relative humidity of 75%, at least 1 m from heating. The warranty period is 18 months from the manufacture date.  
Closed box of powder coatings must undergo acclimatization before opening within 48 hours in the operating room.

**Accident prevention**  
Application has to be done indoor with installed ventilation providing clean air in the working area.  
Personal should have special equipment, clothes and personal protection organs equipment.  
Powder coatings can be explosive. During the work do not admit source of ignition, sparking, overheating of the powder, cloud formation and powder dust accumulation. Do not smoke.

The product is intended only for the professional use by the consumer with sufficient knowledge in powder coatings application and labor safety. This technical data sheet is not comprehensive and is based on laboratory research and our experience. Product usage and results are determined in a greater degree by the consumer conditions, as well as compliance with the manufacturer's recommendations. In the absence of control over all conditions observance from our side, we are not responsible for the end results, but we are responsible for the material quality according to the quality system acting in MAV Ltd.